

Property Rights Dimensions of Forest Management and Control:
Case Studies in the Solomon Islands and British Columbia, Canada

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Abstract

There has been a tendency in the forest policy arena to concentrate on top-down managerial and technical aspects of forest management in order to ensure long term supplies of timber and, to a lesser extent, conservation of biodiversity. By analysing the political dimensions of property rights, these approaches to forest management can be understood to mask the fact that forests are often contested domains, with local forest communities' rights and aspirations often at odds with the dominant production/protection regime.

The thesis thus analyses the property rights assumptions of the dominant forest management regime in relation to forest communities' rights and access to forest resources, and analyses how and why property rights institutions are chosen and how they evolve over time. By defining property rights as political institutions establishing reciprocal relationships between social actors in relation to forests, issues of power, exclusion and competing rights claims become the central focus of analysis.

An analytical framework based on institutional theory is adopted to explore the complex political processes that shape evolving property rights institutions. Institutional theory identifies key factors that act as constraints or incentives to institutional choice and change: distributional conflict; asymmetries in power between bargaining parties; the role of ideology; and historical path dependence. The thesis analyses data from two case studies, the Solomon Islands and British Columbia, Canada, in order to investigate these factors in an empirical setting. The findings suggest that the analytical factors provide a useful means of comparative analysis and help explain the dynamic political processes surrounding property rights institutions and forest management in each case, not only in terms of how the institutions were established but also how change has been constrained or mediated over time.

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Chapter One

Introduction

1.1 Context for the research

This thesis is concerned with exploring the property rights dimensions of forest management and control, within the context of forests as contested domains. The research topic arose as a result of the author's experience of forest policy processes at a global and national level. These appeared to lack informed input regarding the implications of forest policies for local forest communities, whereas practical experience suggested that the policies themselves often had significant impacts on local forest communities' lives. In order to investigate the nature of the connections between these two levels of analysis, the thesis explores how the prevailing policy approach to forest management, referred to as the "forest management regime", finds expression in property rights institutions that mediate relationships between social actors in regard to the forest resource. The focus is on forest management and the allocation of forest resources as a political process. By adopting a theoretical framework for analysing the political dimensions of property rights, this thesis firstly aims to explore the implicit property rights assumptions of the dominant forest management regime, particularly in relation to forest communities' rights and access to forest resources. The second aim of the thesis moves beyond a critique of the prevailing property rights assumptions of forest management to analyse how and why property rights institutions are chosen and how they evolve over time, within the context of forests as contested domains. It therefore seeks to analyse property rights institutions as social relations that are shaped by complex and dynamic processes that constrain or facilitate institutional choice and change.

This chapter discusses the prevailing approaches to forest management, which tend to concentrate on top-down managerial and technical aspects of forest management in order to ensure long term supplies of timber and, to a lesser extent, conservation of biodiversity. The implicit property rights assumptions regarding forests and the allocation of rights to use forests are discussed and data is presented on the way these property rights assumptions are reflected in actual global forest ownership patterns. The chapter then summarises the focus of the thesis, presenting a synopsis of the remaining chapters.

1.2 Prevailing approaches to forest management

As popular understanding of the environmental importance of forests has grown, so have calls for their protection. Natural forests contain the most significant terrestrial ecosystems on the planet. It is estimated that forests originally covered 50% and now cover around 30% of the world's land area (FAO, 2001a). Whilst there are a number of different forest ecosystem types according to biogeographic regions, such as temperate forests, boreal forests, tropical dry forests and tropical moist forests, all natural forests provide a broad range of environmental goods and services. They regulate global and local climates, stabilise soils, protect and regulate the hydrological cycle, contain the bulk of terrestrial biodiversity, provide wildlife habitat and a range of timber and non-timber products, see figure 1.1.

Figure 1.1 Environmental goods and services provided by natural forests

Environmental goods	Environmental services
Timber for construction	Biodiversity storehouse
Fuel wood	Wildlife habitat
Non-timber forest products	Hydrological cycle regulation
Rattan	Climate regulation – macro and micro levels
Cork	Soil quality and stabilization
Resins	Shelter
Medicinal plants	
Fruit	
Nuts	
Game	

The 1980s saw the emergence of a popular global concern about the fate of the world's forests, in particular tropical rainforests. This was the decade when satellite imagery showed the Amazon burning; when the deforestation rates in the tropics became of international concern; when the importance of tropical rainforests as storehouses of biodiversity was described by scientists and when environmental NGOs first organised high profile campaigns to boycott tropical timber products. All of these served to highlight the fragility of rainforest ecosystems and the fact that the future of the world's forests was under threat unless the global community took action.

However, forests are not only of environmental significance, they also play an important role in social and economic development. Human interaction with forests has occurred for thousands of years, with timber providing the principal source of fuel and building materials globally, until the middle of the 19th century and the increasing use of fossil fuels (Perlin, 1989). They are also sources of non-timber forest products such as nuts, fruit, honey, latex, rattan, medicinal plants and game. In the 21st century, forests

continue to provide the principal means of fuel and construction for the majority of the world's population, and millions depend directly on timber and non-timber forest products (NTFPs) for their survival. The World Bank estimates that forests, open woodland and agroforestry systems contribute directly to the livelihoods of 90% of the 1.2 billion people living in extreme poverty; that 60 million people, mainly indigenous and tribal groups, are almost wholly dependent on natural forests; and that 350 million people live in or next to natural forests and depend almost entirely on forest resources for income and subsistence (World Bank, 2003).

The importance of forests has been recognised by those in political power for centuries, from the ancient Greeks to contemporary nation states around the world, and thus control of forests and access to forest resources have long been strategically significant politically as well as being a primary source of livelihoods for forest dwellers (Perlin, 1989). In particular, industrial timber production has been of immense economic and political importance over the centuries. Just over half of all wood harvested in the world is used as firewood, whilst the rest is used for industrial purposes, see Figure 1.2.

Figure 1.2 Volumes of wood used as fuel wood and industrial wood, 1991-1995

	World roundwood production	World fuel wood production		World industrial wood production	
	000 cu m	000 cu m	%	000 cu m	%
1991	3388692	1821801	54	1566891	46
1992	3329138	1843467	55	1482332	45
1993	3335373	1858662	56	1476711	44
1994	3375882	1893550	56	1482332	44
1995	3411044	1922611	56	1488433	44

Source: FAO (1997)

Trees for fuel wood are rarely the same as trees for industrial wood production, with the bulk of fuel wood being sourced close to population centres, whilst timber tends to be commercially extracted in more remote areas, and therefore the two are rarely competing for resources (Sedjo and Lyon, 1990). There is increasing recognition of the role that non-timber forest products play in the social and economic lives of forest-dependent people, and these provide important subsistence and revenue sources from local and national markets (Repetto and Gillis, 1988; Peters, Gentry and Mendelsohn, 1989). Notwithstanding the importance of fuelwood and NTFPs to forest-dependent people, it is timber that is the product which frequently attracts most international attention, being a significant contributor to the global economy and international trade. Production of timber and manufactured timber products are estimated to contribute more than US\$450 billion to the world market economy each year, with the annual value of internationally traded forest products being between US\$150 and US\$200 billion (World Bank, 2003). As a result, forest management policies have evolved to focus primarily on timber production rather than on other goods and services.

Prevailing approaches to forest management are based on specific value systems regarding why and how forests are useful. Forest management in its broadest sense implies decision-making about the allocation and use of forest resources within a framework of clearly identified and agreed upon goals, in principle based upon sound ecological knowledge of the forest resource and an assessment of the needs of the majority of beneficiaries. In practice, decision-making regarding forest management is normally the jurisdiction of government departments, who generally operate within national government strategies.

Forest management is considered to be important because forests are perceived to be scarce resources and therefore decisions need to be taken regarding the allocation and use of forest resources. Forest management is viewed as part of an overall national development strategy to maintain forests and obtain revenue from them. Given the economic importance of timber, both at national and international levels, the production of timber has thus become the primary focus of forest management policies and practices. There is broad acceptance in mainstream policy debates that timber harvesting is a way of ensuring forests are not cleared altogether, particularly if they are properly valued (World Bank, 2003; Pearce, 2001; Barbier et al, 1994). Timber harvesting takes place under institutional arrangements whereby the state (national or provincial, depending on jurisdiction) identifies areas of forest to be managed for timber production - usually as part of a Permanent Forest Estate. This is a nation's forest endowment that is designated to be maintained as forest rather than being cleared for other purposes. It is usually subdivided into production and protection forests.

The basis for identification of production forests is those areas that contain valuable timber species that are accessible for harvest. In practice, the most accessible forest in terms of transport and topography is harvested first, such as forests around coastal areas. Thus, the timber industry has moved over decades from the most accessible to less accessible forest areas as the resource is mined of harvestable timber (Poore, 1989). This is true in temperate forest areas of North America (Sedjo and Lyon, 1990) and the tropical rainforests such as those in Africa (Valeix, 1999) and South East Asia (Aiken and Leigh, 1992). Thus, in North America, timber production has shifted from East to West and from coastal to inland areas. In Africa, harvesting is shifting from coastal locations such as Nigeria, Ivory Coast and Ghana, whose primary forests are virtually

exhausted, to the forests of Central Africa, such as Cameroon, Gabon and the Congos. In South East Asia, Philippines and Thailand have become net importers of timber as their commercial primary forest resources have been exhausted and new sources of timber are being exploited in Cambodia, Laos and Vietnam.

There has been a tendency in forest management research and the forest policy arena to concentrate on the managerial and technical aspects of forest management in order to ensure long-term supplies of timber and, to a lesser extent, conservation of biodiversity. Timber production has therefore been the domain of economic and silvicultural specialists, whilst conservation has been the domain of biologists, often specialising in ecology or wildlife. Thus, at the macro-level, forest management takes place within broad economic development strategies, with timber production being an important source of revenue to governments through royalties, stumpage fees, export and corporation taxes etc. At the forest stand level, decisions are often based on a mix of economic and silvicultural considerations that frame operations, such as which species to harvest, where to harvest, how to harvest, the nature of processing and the demands of the consumer.

The commercial production of timber has evolved to be the primary function of forest management policies: "The prime objective in forestry is to grow trees to produce timber, whatever the secondary objectives may be. The forest manager thus has to produce as much timber as possible, as quickly and economically as possible, within the various constraints imposed" (Williams, 1988:125). Because commercial timber production is the dominant goal of modern forestry, economics has become an important forestry management tool on two levels: firstly, within the broader sphere, to

make choices between the various possible uses of scarce resources; secondly, within a more specific forestry context to make decisions on the appropriate mix of resources, labour and capital (Pearse, 1990). Thus economists aim on the one hand to allocate forest resources between competing claims in the most economically efficient manner (which can result in forest clearance, for example by conversion to agriculture) and on the other to maximise rents from timber extraction, calculate the optimum economic sustained yield of timber and other products, and help determine the size of the annual allowable cut, the age to which trees will be allowed to grow before cutting and the specific areas to be cut (Robinson, 1988).

Economic models are also used to predict global trends in the forestry sector, in order to identify or predict supply and demand changes that could have an impact on volumes and location of timber production, although this has proved to be an inexact science. A review of the forestry sector carried out at the International Institute for Applied Systems Analysis synthesised studies conducted into structural changes that could affect the global forestry sector, focusing on issues of demand, supply and international trade (Kallio, Dykstra and Binkley, 1987). The authors considered forest resources and timber supply, the forest industry, demand for forest products and international trade and they projected sharply rising prices as supplies became more limited due to declining availability of forest resources. Conversely, Sedjo and Lyon (1990), in their timber supply model, forecast modest price rises that would tail off as forest management practices were introduced to move from depleting old growth stock to managed secondary and plantation forests. Nagy (1988) argued that models based on demand and supply, prices, markets etc are of limited value because of the highly variable nature of

real market forces and concluded that complexity of market conditions are difficult to simplify and generalise.

Economic analyses often refer to the importance of establishing long-term, secure tenure arrangements over forests, both as a means of combating deforestation (Panayotou and Sungsuwan, 1994) and in order to facilitate sustainable forestry practices (Barbier et al, 1994). In particular the security, length and size of the tenure are considered to be significant. Thus, the argument is often made for long-term, secure and sufficiently large concessions in order to provide economic incentives for forest management and sustainable timber production.

The other dominant managerial discipline applied to forestry has its roots in biological sciences, with silviculture and the analysis of forest dynamics being used to calculate sustained yields of timber, utilising data on growth and regeneration rates to determine felling practices and post-harvesting treatments. It assumes that if the right scientific analysis can be used to work out the maximum sustained yield of timber through harvesting and planting techniques, then tree crops can be managed on an on-going basis. Silvicultural systems are devised to manipulate the forest to favour certain species which are the "crop" or "stand" to be harvested, usually for timber (Whitmore, 1991; Matthews, 1989). Systems have been developed according to the amount of light required by the target species to regenerate, and so are based around the amount of gap left in the canopy. They range from the removal of all timber from the cutting area at one time (monocyclic or clearcutting) to selective systems where only certain trees are removed on a polycyclic basis in a continuing series of felling cycles (selective logging) (Robinson, 1988). Most tropical forestry management is based on the polycyclic method, with the selection of a relatively low number of target timber species, based on

the assumption that natural regeneration will occur without too much intervention as long as enough seed trees are left to provide adequate seedlings to produce a second crop, usually being calculated as within a 20-30 year cycle (Johns, 1997). The monocyclic system is based on the clearance of commercial trees and other non-target species with the aim of creating an even-aged stand of commercially viable species. Seed trees and seedling stocks are required to produce the crops. This is a longer rotation system, calculated at around 70 years (Johns 1997). The success of silviculture and harvesting methods depend on the extent to which they operate within the natural biological limits of the forest (Whitmore, 1991). Polycyclic methods are thus employed in forests where forest composition is heterogeneous and target species are spread amongst other species, such as tropical rainforests, whilst monocyclic methods are employed in forests with a more homogeneous composition, such as boreal forest systems. However, given that many timber species live to upwards of two hundred years and do not reproduce at an early age, some forest ecologists consider that even felling rotations of 40 to 50 years are not conducive to maintaining forest composition (Richards, 1996). For example, the moabi tree, which is an African hardwood highly valued by the commercial trade as well as having high value to local communities, only reproduces at around 70 years (Debroux, 1998). Data about forest composition and regeneration rates are rarely available, thus making accurate calculations about truly sustained yield harvesting difficult to achieve (Richards, 1996; D'Silva and Appanah, 1993).

In summary, technical aspects of timber harvesting have become the single most important training for professional foresters. Technical analyses of the timber industry focus on timber supply models which link ecological information about forest growth to economics and markets (Binkley, 1987). The underlying assumption of forestry within a

managerial and technical approach is that a large enough area of forest is available to be managed on an economically and biologically viable basis. The alliance between silviculture and economics, as practised by professional foresters and forest economists, is described as an uneasy one however, with foresters often blaming economists for not working within the biological limits of forests, whilst economists accuse foresters of not considering the wider economic considerations of society with regard to allocation of scarce resources in the most efficient manner (Pearse, 1990; Whitmore, 1991; Robinson, 1988).

A further aspect of natural forest management that has gained increasing importance since the 1980s, due to the much greater awareness of the ecological consequences of deforestation and forest degradation, is management to conserve non-timber goods and services, including recreation, aesthetics and environmental services, such as the preservation of biodiversity (see, for example, Grainger, 1993). These claims have primarily been met by the development of conservation policies, such as the establishment of national parks and reserves, which seek to preserve areas of forest in tact by prohibiting all, or some, human activities within their boundaries in order to protect the selected ecosystems from degradation or deforestation (Ghimire, 1991). It is now being increasingly argued that the range and extent of totally protected areas are not going to be sufficient to protect adequate areas of ecologically important forest. The development of buffer zones surrounding protected areas are being advocated, where sustainable forest management policies would allow for environmentally friendly activities (Blockhus et al, 1992). Also, conservation areas within timber management areas are being advocated, with the articulation of the need to integrate conservation into timber management regimes being one of the measures to increase sustainable forest management (Johns, 1997; Higman et al 1999).

As the understanding of forest ecosystems has increased, the arguments for conserving representative ecosystems in protected areas has also increased. Forest ecosystems contain the bulk of terrestrial biodiversity and as such have been the focus of global conservation efforts. Approaches range in scale, from the macro- level of forest landscapes to the micro-level of forest stands (Hunter, 1999). The increasing understanding of biodiversity and forest ecology has led to a change in emphasis with regard to conservation. Forest reserves have often been located in areas with low economic value, for example mountainous zones where timber extraction would be uneconomic, thus ecological values have rarely taken precedence over economic values (Norton, 1999). However, with an increasing understanding of forest ecology and dynamics, the concept of representativeness has become increasingly important in identifying areas for conservation, whereby each protected area should contain the full range of ecological characteristics based on biogeographical studies and ecological surveys. Thus, the development of conservation policies are increasingly based on issues of scale and representativeness that apply either within concession management areas, or in the protection of forests within reserves that are gazetted by the state and in which human activities are largely forbidden. In considering forest biodiversity, Oliver et al (1999) identify a complex organizational hierarchy of forest management, ranging from operations within a forest stand, through landscapes, sub-forest and forest to policy. They argue that this organisational hierarchy can be effective whatever form of property rights are in place, as long as, in the case of single ownership (either private or public), an inefficient top-down approach is avoided, and in the case of multiple ownership that non-market values are incorporated.¹

¹ In their analysis, Oliver et al do not consider those multiple owners who are not primarily involved in resource extraction for monetary returns, rather they identify multiple owners as being "free market entrepreneurs" (Oliver et al, 1999: 589).

In summary, the mainstream approaches to forest management can therefore be described as a blend, in varying measures, of silvicultural techniques, economics and conservation, with the dominant goal being the sustained production of timber on an ongoing basis, and the secondary goal being conservation of environmental services (Shepherd, 1992; Poore, 1989). These technical and managerial approaches tend to favour relatively large areas of forest as management units and therefore have implicit property rights assumptions regarding the ownership of forests and the allocation of rights to use forests. The underlying assumption is that the state and private interests are the most appropriate stakeholders to manage and control the forest resource to achieve timber production and conservation. This in turn is reflected in global forest ownership trends.

Accurate data on tenure and property rights to forests have historically proved difficult to obtain due to lack of transparency. Often the information is not made publicly available by governments, or indeed is not systematically collated by them. Using the available official tenure figures for 24 of the top 30 forested countries,² White and Martin (2002) extrapolate percentage distribution of global forest ownership according to the two broad categories of public and private ownership, further subdivided to reflect the extent to which communities administer or own forest lands, see Figure 1.3 below.

² The 24 countries for which data were available for White and Martin's study are: Argentina, Australia, Bolivia, Brazil, Cameroon, Canada, Central African Republic, China, Colombia, Democratic Republic of Congo, Gabon, Guyana, India, Indonesia, Japan, Mexico, Myanmar, Papua New Guinea, Peru, Russian Federation, Sudan, Sweden, Tanzania, USA. The remaining six countries, for which data were unavailable, were: Angola, Congo Republic, Mozambique, Paraguay, Venezuela and Zambia (White and Martin, 2002, pp. 4-5)

Figure 1.3 Percentage distribution of global forest ownership

Category of forest	Category of ownership according to legal definitions			
	Public		Private	
	Administered by Government	Reserved for Community and Indigenous Groups	Community/ Indigenous	Individual/Firm
Global Forest Estate	77	4	7	12
Developing countries	71	8	14	7
Developed countries	81	1	2	16

Source: White and Martin (2002)

According to these data, broadly, 77% of the world's forests are publicly owned and under state control, 11% have a level of recognised community control and 12% are owned by individuals or corporate entities. In developing countries, the amount of forest land owned or administered by communities rises to 22%, whereas in developed countries the figure is only 3%. Whilst this extrapolation provides a useful indicator of broad ownership patterns, it masks some important variations. For example, in the USA 55% of forest lands are privately owned by individuals and firms. Such private ownership by individuals and firms is even more extensive in Sweden (70%), Finland (80%) and Argentina (80%), whilst in contrast Mexico and Papua New Guinea have high levels of community ownership of forests, with the former having 80% of its forests under community ownership and the latter having 90% under community ownership (White and Martin, 2002).

Given that the majority of the world's forests are public forests controlled and administered by governments, how the state manages and allocates these forests is significant. The state sets economic development objectives, which may involve

decisions regarding the amount of forest to be converted to other uses, for example agriculture, and the amount of forest to be reserved as a Permanent Forest Estate, that is kept as forest. The state sets national forest management objectives and establishes broad laws and regulations for the use and management of forest resources.

Governments are therefore responsible for establishing forest policies and legislation and controlling at a national level the priorities for use of forest resources. National governments take part in intergovernmental initiatives that influence the evolution of forest policies at global and national levels (Gale, 1998; Humphreys, 1996). The state is represented by national, provincial and local governments as well as civil servants and the judiciary, all of whom can and do play a role in forest management and developing forest policies. For example, the forest departments of various levels of government play an important role in developing, monitoring and implementing forest policies and legislation. In the case of production forests, governments have in the main chosen to grant access rights and to a greater or lesser extent devolved management authority to the corporate sector via contractual arrangements to harvest timber (White and Martin, 2002; FAO, 2001c). In return for security of access to timber for a specified period of time, companies undertake to pay royalties and other fees to the governments. States tend to directly manage the forest resource when conservation is the primary objective, although increasingly there are examples of the management of protected areas being delegated to private organisations, such as non-governmental organisations, or even of forests being bought by private interests in order to conserve them.

Whilst White and Martin's work makes a significant contribution to analysing broad patterns of control of the world's forests, there are important issues that such data ignore. For example, the designation of forests as public forests administered by the

state is a contested concept in many countries where indigenous and other forest-dependent peoples' traditional rights are claimed but unrecognised by the state. Also, the allocation of large concession areas for timber production or the designation of protected areas often undermine usufructuary rights and effectively exclude local forest dwellers from access to and control of local forest resources. In order to analyse property rights dimensions of forest management and control taking into account such factors, this thesis aims to explore the property rights assumptions of the dominant production/protection forest management regime, particularly in relation to local forest communities' rights and access to forest resources.

The following section outlines the focus of the thesis within this context. However, first here is a brief discussion of the term 'local forest communities' as used in this thesis.

The term 'local forest communities' has been used to identify groups of people who live in or close to areas of forest that they rely on to provide economic, social and ecological goods and services for their livelihoods and well-being. For example, the forests could provide potable water, non-timber forest products, employment and business opportunities and recreational activities to people living in a village or settlement in the forest. However, the thesis acknowledges that communities are heterogeneous, with individuals possibly belonging to a number of different, not necessarily place-specific communities, such as churches, conservation groups or internet-based communities, creating different allegiances and interests. It also recognises that within location-specific communities there need not be social cohesion, with individuals or groups having differential power and values. Individuals within communities can also be state representatives or have links to business interests. There is thus a complex set of

relationships that exist within local forest communities and between these communities and other groups, and this is accepted as a factor within the term as used by the thesis.

1.3 Focus of the thesis

In contrast to prevailing approaches to forest management outlined above, this thesis considers forest management as being an inherently political process, incorporating concepts of power, exclusion and competing rights claims. The thesis therefore analyses the property rights dimensions of forest management and control within the conceptual framework of property rights as political institutions. It does this by developing a theoretical framework that is explored in the context of empirical data from two case studies, the Solomon Islands and British Columbia, Canada. The aims of the thesis are to investigate the implicit property rights assumptions of the dominant production/protection forest management regime, particularly in relation to forest communities' rights and access to forest resources, and to analyse how and why property rights institutions are chosen and how they evolve over time, within the context of forests as contested domains.

Chapter Two elaborates the theoretical framework for the enquiry. It starts by identifying the prevailing approaches to property rights and natural resources in the literature, which are often predicated on the "Tragedy of the Commons" model and critiques of it. This literature proposes different property rights regimes as offering solutions to the dilemma of how to manage resources sustainably. Section 2.2 briefly describes these regimes, namely open access, private property, state property and common property, clarifying misconceptions of common property that associate it with the Tragedy of the Commons model. Thus, much of the literature has focused on the

functional nature of property rights institutions, presenting an array of institutional options for managing resources.

Less attention has been paid in the literature on natural resources to critical analyses of the political and dynamic characteristics of property rights institutions, and this thesis aims to contribute to that literature. The chapter reviews the theories that are fundamental to the concept of property as it has evolved in the western liberal tradition. Section 2.3 explores the linkages between economic, juridical and political systems within this tradition and how they have all supported private property as a pragmatic and normative model for delivering wealth maximisation and individual freedom, protected by a body of laws. In order to provide a conceptual framework for understanding the political aspects of property rights, section 2.4 argues that by defining property rights as political institutions establishing reciprocal relationships between social actors, issues of exclusion, power, distributional conflict and differing, sometimes competing rights claims, become the central focus of analysis. These in turn challenge the assumed neutrality of economic approaches to property rights in regard to efficient allocation of resources and highlight the power relations and resistance to change inherent in the status quo. Section 2.5 proposes an analytical framework based on institutional theory that identifies four key factors influencing institutional choice and change: distributional conflict; bargaining power; ideology; and historical path dependence. By adopting this theoretical approach, the chapter argues that there is the potential for a more complete understanding of the property rights dimensions of resource management and control and the processes behind evolving property rights arrangements. The thesis uses these themes to guide the analysis of the empirical data, to help explore the political aspects of property rights institutions and to shed light on

the complex processes by which property rights institutions are established and modified.

Chapter Three considers the property rights assumptions behind forest management policies, the implications for stakeholders and the consequences for the development of alternative policies, such as community forest management. By describing the complex web of inter-relationships between decision-makers, managers, controllers and users of the forest resource, the chapter argues that forests can be understood as contested domains, particularly those forests assigned to timber production. Sections 3.2 and 3.3 argue that the managerial and technical approaches to forest management are rooted in the dominant property rights paradigms of the western liberal tradition and the tragedy of the commons, and property regimes have evolved within this framework. As such, private property rights to forests are predominant in the form of timber concessions and other contractual arrangements, notwithstanding the fact that states control the majority of the world's forests in the public interest. With regard to protection forests, states usually maintain direct management of protected areas. A growing understanding of common property regimes and the language of participation has meant that forest policies increasingly seek to include forest communities. However, the literature suggests that this is usually in relation to forests that are outside the main production/protection sphere.

Having provided in Chapter Two a conceptual basis for understanding the property rights assumptions underlying management, decision-making and control of the forest resource, Section 3.4 explores the multiple layers of rights claims to forests, especially those forests that are allocated to timber production. By reviewing literature on the relationships between the timber regime and local forest communities, it becomes clear

that forest-dependent communities' rights are often at odds with the dominant production/protection regime, despite the growing interest in community forest management both as a concept and as a policy option. The chapter therefore argues that the dominant approach to forest management masks the fact that forests are contested domains. By defining property rights as an expression of reciprocal relationships between these social actors, issues of control, access rights, exclusion, participation, empowerment and differing, sometimes conflicting, rights claims can become the central focus of analysis of forest management policies. The chapter therefore concludes that property rights issues are central to understanding forest policy development, even though they are not often explicitly elaborated and the assumptions are rarely challenged in the policy arena. This in turn has implications for alternative forest management strategies, such as community forest management. Finally, key research questions are identified to be explored in the empirical research: how has the dominant forest management regime evolved? What are the property rights implications of the forest management regime for communities? How do local forest communities and the dominant forest management regime interact?

Chapter Four describes the methodological approach adopted by the thesis to examine the questions framed by Chapters Two and Three. It describes the rationale for adopting a case study approach in the light of the theoretical framework and outlines the basis for selecting the two case study locations, the Solomon Islands and British Columbia, Canada. These two case studies were considered to be particularly illuminating examples because, in each location in the 1990s, forestry was a significant economic activity and a dominant political issue, engaging significant public debate. A comparative analysis was considered to be useful because it allowed the analytical themes to be investigated in different settings, which would in turn provide further

insights into the theoretical approach. The chapter also describes how the research was operationalised, discussing issues of triangulation and data comparability that arose, as well as the methods and stages in data collection.

Chapter Five presents research findings from the Solomon Islands. In the Solomon Islands, community tenure has been the dominant land ownership institution. However, the case study reveals how colonialism by the British led to attempts to introduce forest management practices and associated tenure policies adopted from the models imposed elsewhere. As a result, concepts of state control of the forest resource to promote private sector development were introduced. Explicit in this was the belief that Solomon Islanders were not able to develop commercial timber operations themselves. However, tasked with finding forests to establish a Permanent Forest Estate, with its implicit assumptions of empty and unused forests (“Waste Lands”) and exclusion of other users, the colonial administration failed due to the resistance of Solomon Islanders and sympathetic representatives.

In the 1990s, although customary tenure remained the dominant tenure, management of the forest resource was increasingly ceded to the private sector by the state and communities. This introduced an additional layer of rights to forest resources on top of customary tenure, in practice undermining the traditional approach. The introduction of private property-type arrangements gave considerable power to the private sector, both in terms of negotiating with landholders and in terms of operational control of forest areas. Decision-making regarding the allocation of the resource to the private sector for timber production was subverted by individuals within communities for the promise of personal gain. This in turn undermined existing property rights structures. The changing ownership of companies increased the sense of distance between traditional landholders

and the managers of the forest resource. Also, communities saw the benefits from the resource exploitation accrue either to private companies or to only certain members of the community, causing distributional conflict at a local level. However, there were also examples of new institutions being established as a way of asserting communal rights in new forms, helping to demonstrate the complex and dynamic processes surrounding property rights institutions in the country.

Chapter Six summarises research findings from British Columbia. The dominant forest management paradigm is epitomised in British Columbia, that is state control of the forest resource with management of the resource delegated to private corporate interests. As a result, First Nations and local forest communities found themselves excluded from decision-making, management and control of forest resources. There was evidence of conflict over allocation decisions, with a strong wilderness protection movement developing in the province. The 1990s saw forest-dependent communities increasingly express a desire to have more control over decision-making and management of the forest resource, and data collected in the Nelson forest region showed the attempts by communities there to gain more control over local forest resources through community management plans, albeit with different results.

Chapter Seven presents a cross-case analysis of the two case studies in order to investigate the political dimensions of property rights institutions and the factors that influence institutional choice and change. The chapter draws together themes and issues raised in the empirical work using the analytical factors elaborated in Chapter Two, namely distributional conflict, bargaining power, ideology and historical path dependence, as a framework to guide the analysis of the empirical data. The empirical

data in turn are used to reflect on the analytical factors and their relevance in explaining the political dimensions of forest management and control.

Chapter Eight concludes by discussing the contribution of the thesis to the literature on forests and property rights, in particular the interactions between the timber regime and local forest communities. The thesis contributes to the literature on institutional theory by considering its applicability to understanding the political and dynamic processes underlying the establishment of property rights institutions and the constraints and incentives influencing institutional change. The limitations of the thesis are also discussed, both in terms of the empirical data and the theoretical framework, with avenues for further research being identified.

Chapter Two

Property Rights: Theoretical Framework

2.1 Introduction

This chapter presents a theoretical review of the property rights framework adopted by the thesis. Section 2.2 summarises prevailing property rights approaches within environment and natural resources literature, describing a range of institutional options for managing scarce resources and the influence of the Tragedy of the Commons model underlying arguments for and against different property regimes. The chapter then critically explores the philosophical underpinnings of property in section 2.3, arguing that an analysis of the western liberal concept of property is crucial to understanding the congruence between economic, juridical and political theories in prevailing property rights approaches. Section 2.4 discusses a broad conceptualisation of property rights as political institutions, raising complex processes of power, exclusion, distributional conflict and competing rights claims. In section 2.5, an analytical framework is proposed to explore the political aspects of property rights institutions and to shed light on the complex processes by which property rights institutions are established and modified. By focusing on factors such as distributional conflict, relative bargaining power and ideology in a historical context, the framework can offer insights into why property rights institutions are chosen, why certain parties win whilst others lose and how property rights institutions evolve over time. In particular, by defining property rights as political institutions establishing reciprocal relations between heterogeneous and differentially endowed social actors (both “owners” and “non-owners”), the assumed neutrality of economic approaches to property rights in regard to efficient

resource allocation is challenged and the shifting power relations inherent in property rights institutions are highlighted.

2.2 Property rights and natural resources

There is a growing body of literature that discusses property rights and natural resources. This literature tends to discuss the theoretical and empirical case for different property rights regimes, presenting a range of institutional options for successfully managing scarce resources so that they are not overexploited. Traditionally, the debate has focused on the relative merits of private property regimes compared to state property regimes or state regulation. Much of this work is underpinned by concepts of collective action problems, such as presented in the influential Tragedy of the Commons model which states that resource users will inevitably overexploit resources in the absence of externally imposed regulations or private property regimes.³ The literature on common property regimes has made a significant contribution to clarifying misconceptions about the commons and to understanding the circumstances within which communities are able to self-organise to manage resources successfully. This section describes the Tragedy of the Commons model followed by a brief summary of the property rights regimes described in the literature.

Current thinking on property and natural resources is heavily influenced by Garret Hardin's oft-cited paper, published in 1968, "The Tragedy of the Commons". It describes the inevitability of the process by which exponential population increases (as described by Malthus) lead to an absolute decrease in the per capita share of a finite world. His example involves a pasture open to all - in his term this is a "commons". Each herdsman can be

³ For further discussion of collective action problems and critiques of this approach see North (1990); Ostrom (1990); Ensminger (1996).

expected to keep as many cattle as possible because, as a rational being, each herdsman seeks to maximise his gain. Whilst this process will not cause any problems for possibly centuries there inevitably comes a point where the carrying capacity of the commons has been reached. This is when the "inherent logic of the commons remorselessly generates tragedy" (Hardin 1968:1244). At this point, each herdsman, on reviewing what is the utility to him of adding one more animal, weighs up the advantages and disadvantages. The advantage is +1, in that the herdsman receives all the benefit from the additional animal. The disadvantage is only a fraction of -1, because the negative impact of overgrazing is shared by all the herdsman. Therefore, according to Hardin, each herdsman independently concludes that his best interest is served by adding another animal, and another and another, with disastrous consequences:

"But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein lies the tragedy. Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all." (Hardin 1968:1244).

In short, according to Hardin, unsustainable use is an inevitable consequence of the "Tragedy of the Commons". This paper has generated much debate since publication in 1968, in particular around the definition of "commons" and the appropriate property institutions to manage natural resources. Responses to the "commons dilemma" have shifted according to the political climate of the time, so that in the 1960s and 1970s the solution was seen as government intervention (the approach which Hardin himself advocated), whereas in the 1980s and 1990s the solution was seen as privatisation (Mishan, 1993). The model lends itself to either approach depending on ideological viewpoint: "The popularity of the [Tragedy of the Commons] model may be related to its

ability to generate both liberal and conservative political solutions" (McCay and Acheson, 1987:5).

Critics have argued that Hardin's paper encapsulates the misconception that the "commons" equate to open access resources, and that this misconception underpins mainstream theory and policy with regard to the management of common pool natural resources such as fisheries, water, forestry and rangelands. Scholars argue that the management of such resources as common property regimes have often been ignored by policy makers, with privatisation or state control being considered as the only management options (for discussion of this, see: Ostrom, 1990; Berkes, 1989; McCay and Acheson, 1987; Ciriacy-Wantrup and Bishop, 1975). Hardin himself later qualified his model as being "the Tragedy of the Unmanaged Commons" (Hardin, 1990), acknowledging that in small communities (up to 150 individuals), resources could be communally managed through peer pressure.

The study of property rights regimes has been a fruitful area of research, in particular in assessing the different institutional arrangements that may be the most effective in conserving natural resources. As described above, property rights approaches to the environment and natural resources are heavily informed by Hardin's model, with common property often being mistakenly associated with unregulated open access resources. The classic presentation of property rights is of open access at one end of the spectrum and either state or private property at the other, with the achievement of state or private property regimes being the optimal arrangement. For example, Muller and Tietzel (1999) suggest two solutions to the "problem of common property": regulation and privatisation. Which option is chosen will, they contend, depend on the type of resource

and on the transaction costs. Individuals are likely to define and enforce exclusive rights if the net gains are positive. When marginal governance costs exceed marginal exclusion costs, users of a common pool resource will adopt a privatisation strategy; otherwise, regulation will be optimal (Muller and Tietzel, 1999). Critics argue that this approach often ignores institutional alternatives to private or state property (Swaney, 1990). Berkes (1989) argues that resources can be held under a number of different property regimes or a mix of regimes: open access (non property); state property; private property; common property. The main characteristics of these regimes are described below.

Open access resources are subject to a "free for all" and are defined as *res nullius* or "non-property". Resources are open access, that is open to anybody and with nobody having a property right claim, either because the resources have never been incorporated into a property management regime or because the regime has broken down as a result of institutional failures in former private, state or common property management regimes (Bromley, 1991). It is open access resources that are subject to the tragedy of over-exploitation described by Hardin above. The two most commonly prescribed management options to deal with this have been state control or privatization, and these are described next.

A **state property regime** is one where control of the resource rests with the state, which can then in turn grant use rights to individuals and groups (Bromley, 1991). The most widespread ideological adoption of this approach was state ownership in the communist regimes of Eastern Europe; indeed the failure of communism is seen by some as a failure of state property and a vindication of private property, a view that has particular

popularity in the USA (see for example Ely Jr, 1998; Yandle, 1995). Apart from this pure form of state ownership, state control of resources in the public interest is common, for example in national parks and forest reserves. The state has played a key role in property rights and natural resources throughout history. Access to and control of natural resources has often been either the motivation for, or a profitable consequence of, colonial expansion, as in the case of the British Empire. Territorial claims to natural resources are often a cause of conflict between states, as in the case of fisheries disputes such as between Britain and Iceland in the 1970s. National sovereignty can therefore be viewed as an expression of rights claims: "Technical or emotional, 'sovereignty', like 'self-determination' or 'nationalism', is shorthand for the assertion of preferential rights" (Demarest, 1998, p.30).

However, national sovereignty over natural resources does not equate to state ownership nor does it mean that states keep direct control of natural resources, with states often deciding on the mix of property rights within their jurisdiction. The philosophical arguments for private property justified European colonisation of native American lands on the grounds that private property and individual ownership rights were civilising and led to economic development. This in turn justified the failure to recognise traditional communal rights (van Meijl and von Benda-Beckmann, 1999; Thompson, 1993). In the wake of colonialism, independent governments have often continued the appropriation of land and natural resources that was traditionally communally held. The state then decides the legal arrangements by which resources are managed: it can either directly manage and control the use of natural resources or it can allocate the resource to private users for specified uses and time periods. In establishing tenure arrangements, the state is the decision-maker regarding the mix of private and public control over scarce

resources. Private property rights are generally accepted to represent the most efficient way to allocate scarce resources⁴ and states adhering to this political and economic paradigm therefore often act as facilitators for private property arrangements of natural resources through allocation decisions and the passing of laws and regulations to protect private property rights (Marchak, 1995). The state's role is thus one of promoting and protecting property rights: "Property is a benefit stream, and property rights constitute the assurance of the state that it will protect that benefit stream" (Bishop and Welsh, 1993).

Private property rights are viewed by many as the most complete form of property rights, being understood to confer exclusive, long-term rights to individuals or firms: private ownership is "any property structure where full (or nearly full) rights to possess, use, manage, alienate, transfer, and gain income from property are granted to individuals" (Christman, 1994:15), see figure 2.1. Private property regimes are associated with formal rules and rights upheld by laws, that others have a duty to respect.

Figure 2.1 Attributes of private property rights

Key elements of private property rights

- Rights to use
- Rights to exclude others
- Rights to transfer (alienation)
- Rights to produce
- Rights to income
- Rights to dispose

Private property rights are commonly viewed as the most efficient and wealth-maximising form of property rights. States often facilitate private property regimes on the grounds

⁴ See section 2.3 for a discussion on the philosophical foundations of prevailing property rights approaches

that they are wealth maximizing and economically efficient. Globalisation and ever-increasing involvement of foreign firms and donor agencies in national economies have increased the discourse of property rights and the type of regime most suitable to attracting foreign inflows of capital - usually, private property arrangements (van Meijl and von Benda-Beckmann, 1999).

In regard to natural resources and the environment, private property is often viewed as the most economically attractive option because the owner can make management decisions and investments knowing that the full benefits will accrue to the owner (Bromley, 1991). Central to the economic approach to property rights is that the more exclusive and full the right, the greater the opportunity for the rights holder to reap the benefits of the resource and investment in it: "the more completely and privately the property rights to an asset are defined, the more will its holder be inclined to maximise the full value of the resource". (Muller and Tietzel, 1999:40). A particular advantage of private property rights is the potential to transfer or alienate a share of the resource, allowing resource users to generate higher returns from the resource. For example, tradable pollution permits can be sold to those who most value them. The theory advocates the privatisation of resources and security of rights to resources so that rights holders have an incentive to plan for the longer term and are more likely to internalise externalities (Boyce, 2002). Private property rights are considered to be an effective way to deal with the externalities associated with environmental problems such as pollution (Turner, Pearce and Bateman 1994) and the management of common pool resources (Devlin and Grafton, 1998). Within this paradigm, resources that are not clearly and exclusively held under a formal property regime (that is a private property regime, which is the most amenable to market solutions advocated by liberal economists), are deemed to be "no property" and

therefore subject to over-use. For example, Muller and Tietzel (1999) identify over-use of common pool natural resources as being a consequence of the absence of formal and exclusive property rights: "Commonplace examples of overuse of resources to which no property rights are devised are those of natural resources where **formal** rights are non-existent. Air, fishing grounds, oil pools, forests or groundwater basins are cases in point." (Muller and Tietzel, 1999:43, emphasis added).

Common property regimes (CPRs) are local institutions that have evolved to establish self-governance of common pool resources, such as fisheries, pastures, water and forests. A growing body of literature argues explicitly that, rather than these resources being subject to the tragedy of the commons articulated by Hardin, access to and conservation of these (scarce) resources can be and often are controlled by local institutional arrangements. CPRs involve a clearly defined community of people with specific rights and obligations enshrined in formal or informal institutions, the community having the right to exclude non-members (Ciriacy-Wantrup and Bishop, 1975; Berkes 1989).

Common property rights have often been dismissed by scholars as being inferior to private property rights, often being identified as open access resources (Posner, 1998; Thompson, 1993). Alchian and Demsetz (1973) argue that communal property rights are inherently unstable and advocate the conversion of communal to private property rights, the alternative being state regulation and control. By defining common property as being synonymous with community property, that is property used communally by an identified group of people with rules of exclusion (Reeve 1986; Bromley 1991; Pearce 1991 and Berkes 1989), then the misconceptions about common property resources

associated with the "Tragedy of the Commons" (or more properly, the "Tragedy of Open Access") approach are avoided. Indeed, some authors cite cases where it is when traditional common property regimes are disrupted, for example through nationalisation or privatisation of a resource or eco-system, that the "Tragedy of the Commons" develops and local people are encouraged to over-exploit (Berkes 1989; Bromley and Cernea 1989; Ostrom 1990).

There is now a substantial body of literature that outlines the theoretical and empirical case for common property regimes (see, for example, Runge 1986; McCay & Acheson 1987; Wade 1987; Berkes 1989; Ostrom 1990; Jodha 1992) and the work of Ostrom has made a particularly significant contribution to developing the theoretical framework in this field, focusing on "design principles" for the development of robust CPRs. Figure 2.2 presents a synthesis of the group characteristics and rules found in successful CPRs. However, the research to date has usually been limited to studying the internal characteristics of common property regimes in successful and failing situations, rather than in relation to the external context (Cardoso, 1999).

Figure 2.2 Attributes of common property regimes (CPRs)

Characteristics of group	CPR rules
<ul style="list-style-type: none"> • Power equitably distributed • within cultural context • socially cohesive group • institutions are fully participatory • knowledge of the carrying capacity • proximity of social group to resource • prospective net collective benefit 	<ul style="list-style-type: none"> • boundaries of community clearly defined • monitoring and enforcement • conflict resolution mechanisms • autonomy to change institutional arrangements • rules of appropriation and allocation reflect local conditions • boundaries of resource clearly defined

Source: Ostrom, 1990

The literature on common property regimes has been important in presenting the conditions by which common pool resources can be managed successfully by communities using rules devised by themselves. Thus, a more complete picture has emerged of ways to avert the “tragedy of the commons” described by Hardin rather than the privatisation or state regulation models that have traditionally prevailed.

The analysis of property rights regimes described above is helpful for understanding the formal rules and informal norms by which natural resources can be managed in the long term. Whilst this approach is useful in describing different types of property rights regimes that could be used to effectively manage natural resources, there is an assumption that, depending on the resource and users, there is a “right” property regime to be chosen from amongst the institutional options (Muller and Tietzel, 1999).

Certainly, this framework provides a useful analytical tool for understanding the various property rights regimes that can be used to manage forest resources. As such, it is a technical and managerial approach to property rights institutions and the management of natural resources (Mehta et al, 1999). However, a shortcoming of this approach is that it does not take account of the power relations inherent in the allocation of property rights nor the complexity of rights and rights claims that can occur in relation to natural resources. These themes are explored in the rest of this chapter, and an analytical framework for investigating the political processes associated with the establishment and modification of property rights institutions is developed. First, the next section critically examines the political, economic and juridical foundations of prevailing property rights approaches.

2.3 Mainstream approaches to property

In every day language, property is viewed as a material object and ownership of property conveys the relationship of the owner to that object, specifically in terms of their rights to the use, benefit and disposal of the material object (Bromley, 1991; Ryan, 1984). Property has become synonymous with bricks and mortar or land in the developed world. Whilst property rules differ from country to country, they are ubiquitous, directly affecting everyone's lives (Denman, 1978). However, property is a far more complex concept than is inferred in everyday usage of the term. Property is a key concept in defining and providing a link between the institutions that encapsulate society and also in defining relationships between individuals within that society (Reeve, 1986).

Property and ownership are viewed as synonymous by western societies. According to Macpherson (1978), there is in contemporary times a misuse and consequently a misunderstanding of property on two levels. Firstly, in common usage property means "things" - material objects that one can own. In fact, the true meaning is "rights in or to things". Secondly, is the fact that property has become synonymous with private property, that is an exclusive right of individuals. This perspective has emerged most strongly in the USA (Thompson, 1993; Yandle, 1995). Ownership equates with the liberal individualistic approach to property, manifested in private property: the unlimited right of an individual to use, limit others' use, dispose of and derive benefit from property (Macpherson, 1978). This approach has political, economic and juridical foundations, which are explored below.

The predominant view of property rights has emerged from liberal theory and the pre-eminence of private property as the representation of individual political freedom and the right to wealth maximisation as protected by a body of laws. The philosophical foundations of private property are based on individualistic and liberal notions of rights of individuals in isolation, who should be free to act how they wish within their defined boundaries of rights (Carter, 1989). According to Bromley (1991:7), libertarian thinkers - economists or political theorists - see property rights as an "immutable and timeless entitlement that can only be contravened with difficulty, and then only if compensation is paid by the state to make the property holder whole".

In the field of economics, property rights are rights to a benefit stream (Bromley, 1991) and private property rights are commonly viewed as the most efficient and wealth-maximising institution. The economic assumptions associated with property rights are that scarce resources need to be allocated efficiently and property rights are a way of allocating resources amongst competing demands (Whynes and Bowles, 1999; Alchian and Demsetz, 1973). The economic foundations of analyses of property rest on reciprocal relations between property rights and economic behaviour: property rights create incentives and transaction costs that affect economic performance; economic factors in turn influence changes in property rights (Pejovich, 2001). Central to the neo-classical economic approach to property rights is that wealth maximisation is best achieved by exclusive property rights. Private property is the most amenable to market solutions advocated by neo-classical economists because it is the most exclusive and complete form of property right. According to Marchak (1995), markets and private property rights are inextricably linked together.

Within legal theory, property rights are expressed within a defining set of positive laws that derive from a state's constitution, statutes, common law and other governmental regulations (Pejovich, 2001). According to Posner (1998), there are three parts to common law⁵ that are relevant to property rights: the law of property is concerned with creating and defining property rights, which are the rights to the exclusive use of valuable resources; the law of contracts is concerned with facilitating the voluntary movement of property rights to those who value them most⁶; and the law of torts is concerned with protecting property rights. Over time, the body of laws related to property rights reinforce the status quo underlying property rights allocations, making change that much more difficult. The state has a dual role; it is the protector of property rights through the enforcement of laws; and the legislator also acts as the giver and taker of property rights, for example being in a position to allocate and reallocate titles to land and resources (Denman, 1978). This dual role of the state is of central importance in considering property rights and is separate from the possibility that the state can also be an owner of resources (see section 2.2 above).

As outlined above, private property rights have become synonymous with individual ownership. Private property rights are therefore usually interpreted as conferring rights to the individual in relation to things, and their freedom to control the use of the thing. In legal terms, property rights are relational, not only conferring bundles of rights to the owner but also determining the relationship of the owner to non-owners. Bromley (1991), Munzer (1990) and Carter (1989) refer to Hohfeld (1966) with regard to clarifying the legal correlates of private property rights: private property rights confer rights to the individual in relation to things, and they can control the use of the thing.

⁵ Common law is the body of law shaped by judicial precedents rather than by the legislature

⁶ Of course, they must also possess the ability to pay. This point is picked up in section 2.4 in relation to distributional justice

However, the correlate of this is that others are excluded from the use of the thing without the permission of the owner. Hohfeld identified four correlates that define the complex set of relations between the owner and non-owners. The **claim right** of the owner to prevent others from entering the land or causing damage to it is linked to the **duty** of non-owners to not enter the land nor to cause damage to the land; the **privilege** of the owner to enter and use the land and do what they like within legal boundaries is linked to non-owners having **no right** to prevent the owner from doing this; the **power** of the owner to transfer the property to someone else or allow someone else to enter is linked to the non-owners' **liability** to be subject to these changes; the **immunity** of the owner from the power of someone else in relation to the property and immunity from extinguishments of the owner's rights and privileges or those granted by the owner to another person is linked to non-owners' **disability** from subjecting the owner to their demands, from removing the owner's rights and privileges or to interfere with the rights and privileges granted by the owner to someone else (Hohfeld, 1966; Carter, 1989).

These correlates are summarised in figure 2.3.

Figure 2.3 Legal correlates of private property rights

Owner	Non-owners
Claim right of owner <ul style="list-style-type: none"> • Others shall not enter the land • Others shall not cause physical harm to the land 	Duty of others <ul style="list-style-type: none"> • Not to enter the land • Not to cause physical harm to the land
Privilege <ul style="list-style-type: none"> • Entering the land • Using the land • Harming the land • Freedom to act (within legal boundaries) 	No right <ul style="list-style-type: none"> • Cannot prevent the owner from entering or using the land
Power <ul style="list-style-type: none"> • Of alienation to another • To create a life estate in another or reversion • To create a privilege of entrance to another 	Liability <ul style="list-style-type: none"> • Others are subject to the changes in jural relations exercised by the owner
Immunity <ul style="list-style-type: none"> • Non-liability or non-subjection to a power of another person • No other person can extinguish the owner's rights and privileges • No other person can extinguish the privileges granted by the owner to another person 	Disability <ul style="list-style-type: none"> • Others cannot subject the owner to their demands • Others cannot remove the owner's rights and privileges • Others cannot interfere with the privileges granted by the owner to another

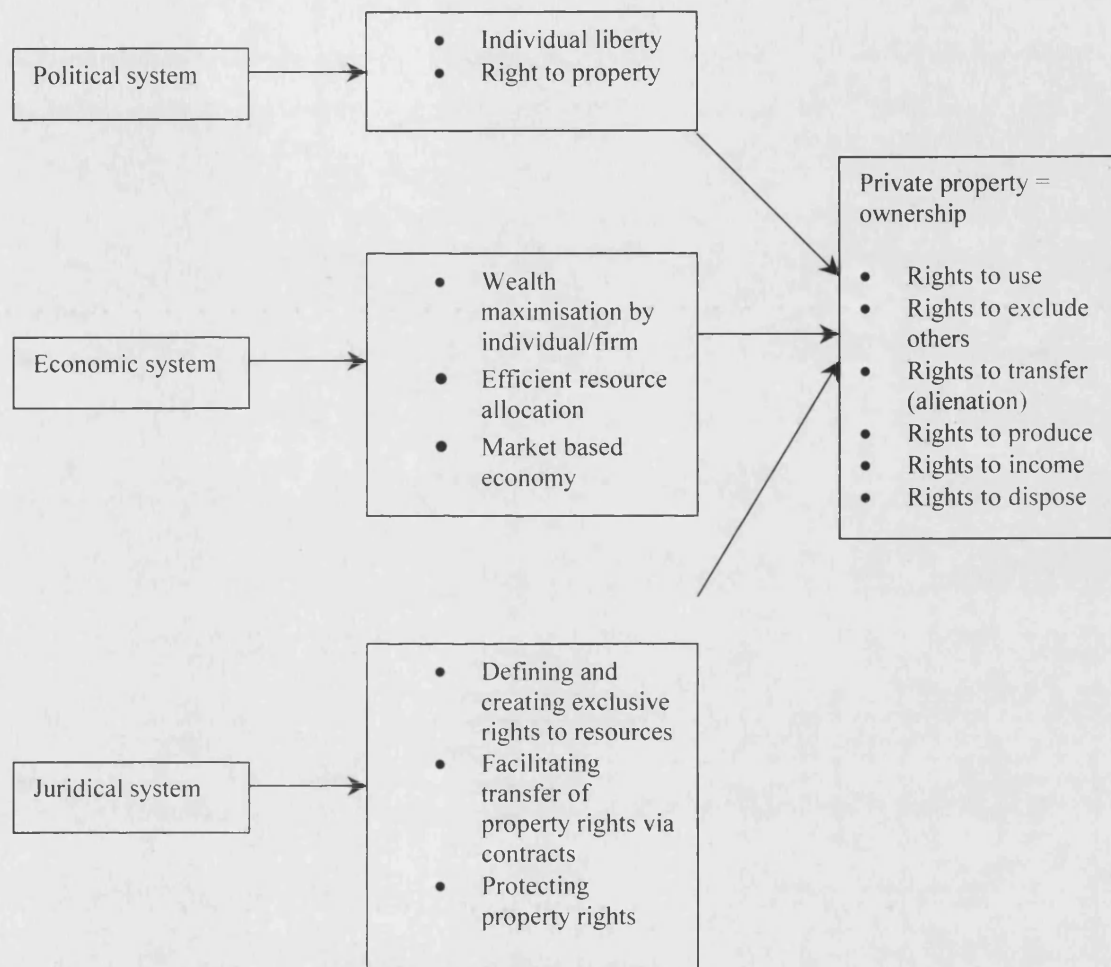
Source: Hohfeld 1966; Carter 1989

This conceptualisation of property is significant because it explicitly recognises property rights as reciprocal relationships between owners and non-owners, thus raising concepts of power and presenting a framework for including all social actors, whether they have formally recognised rights or not. This theme is explored further in section 2.4.

By synthesising the political, economic and juridical approaches to property rights, it is possible to identify linkages between them (Reeve, 1986). Friedman (1994) argues that there is a strong similarity between three types of rights: those that libertarians consider

to be just, those that are economically efficient and those that are recognised and protected by western societies. This congruence between political, economic and juridical systems has evolved over time and is an expression of the overall western liberal view of property. Thus, by examining the philosophical foundations of property, property rights assumptions can be understood in terms of the dominant liberal tradition that has in turn led to the evolution of political, economic and juridical systems favouring private property rights as an expression of political and economic goals, facilitated by the juridical status quo. Within this liberal tradition, the freedom and rights of the individual are highly valued, the individual's right to property being one of the cornerstones of the paradigm. Private property is seen as the most complete form of property right and the one most conducive to wealth maximisation. States are often the facilitators of private property and the juridical system has evolved to protect these rights, see figure 2.4 below. Thus, the congruence between political, economic and juridical systems favours the predominance of private property rights both in a normative and practical sense (Friedman, 1994).

Figure 2.4 Congruence of western liberal views of property



In summary, the previous section highlighted the influence of the Tragedy of the Commons model in property rights regimes approaches to natural resources, traditionally lending itself to either state regulation or privatisation models. Scholars

and theoretical study that communities can, under certain circumstances, develop institutions to successfully self-govern resources. However, this section has discussed the underlying concepts of property within the western liberal paradigm, explaining how the predominance of private property has been established as a result of the congruence of economic, political and juridical processes within the liberal tradition.

This functional approach to property rights implies that, from an array of management options, there is an optimal property rights regime depending on the type and location of the resource or some set of clearly definable circumstances, such as the demands of the market. In other words that there is a "right" solution to the property rights conundrum and that the solution lies in either private property or common property or state property. However, the following section will argue that a broader conceptualisation of property is needed in order to capture the political dimensions of property rights institutions and the complexity of rights and associated relationships.

2.4 Political dimensions of property rights

This section examines the political dimensions of property rights in terms of complex processes of control and decision-making, exclusion, distributional conflict and differing, often competing, rights claims. By focusing on these issues, a broad conceptualisation of property rights is developed that highlights the dynamic nature of property right institutions as mediating relationships of power between social actors rather than simply being a manifestation of rules or norms to govern resource access and use. The use of the term property right institution in this section rather than property right regime is intended to convey the distinction between the functional nature of property rights regimes described in section 2.2 and the dynamic processes surrounding

the establishment or modification of property rights (Reddy, 2002) described in this and the following section.

The term “ownership”, as described in section 2.3, is associated with western liberal concepts of property and defining the exclusive right of the individual or corporate entity towards an object. However, ownership in reality is rarely so absolute as may be theoretically implicit in the liberal concept described above. Individuals rarely have absolute power over a thing in relation to others, as this is usually circumscribed by societal norms or dissipated through share ownership, mortgages etc. However, by identifying who has control of and decision-making power over a resource and who has the right to the benefit stream can be more significant than the "owner" of the resource (Christman, 1994). Jacobs (1991) argues that the central issue regarding the environment is how resources are allocated and not ownership per se, and his example is that different types of companies, whether privately, co-operatively or state owned, operate in a variety of different resource allocation mechanisms, from free market to centrally planned. It would seem to be reasonable then to propose that a consideration of property rights should extend beyond actual ownership of the resource to include control of management and decision-making regarding resources, on the understanding that these can be assigned to different actors. Bromley (1991) cites Leman (1984 p.117) on this point: “How lands are managed, rather than who owns them, is the key to efficiency”. This brings us closer to the true definition of property rights as bundles of rights to a resource, and makes it clearer as to how those bundles can be allocated in different ways. Property rights thus become much more complex institutions; with different rights being held by different actors. Alchian and Demsetz (1973) describe private and state property regimes as the two mainstream options for managing common

pool resources and, whilst they are advocates of private property rights, they accept that the distinction is itself ambiguous because the bundles of rights to a particular resource can be held by different parties, with some rights to a resource being state controlled and some being privately controlled. There could thus be movement along a continuum from state to private property as more of the rights pass to private control, and this can lead to difficulties in defining whether a change in ownership has taken place between state and private property. A practical example of this point is the case of state-controlled common pool resources, such as forests, that are contracted out to private parties in the form of private property-type arrangements. Although the state retains control over public resources, private property-type functions, such as rights to use the forest resource, rights to transfer the right or product to others and rights to the benefit stream, are contracted for a given period to another party who then becomes responsible for the management of the resource, often in the form of private property tenure arrangements.⁷

Thus, the allocation of control and decision-making are important functions of property rights and are imbued with power relations. Libecap (1989) and North (1990) point to this political dimension of property rights: they not only determine the distribution of benefits, but also confer decision-making authority. Denman (1978) describes the “pragmatic function” of property as a power base of critical importance. He argues that a property right is a form of power, conferring a sanction and authority for decision-making. Blauert and Guidi (1992) have noted that in Mexico, ownership of forest resources was not in itself sufficient for communities to be empowered to manage forests communally. As a result, the state was able to allocate timber concessions to companies without involving communities in decision-making, even though community

⁷ See Chapter Three for a more detailed discussion on private property-type arrangements to forests

tenure existed to forests. Public listed companies are often controlled by their management rather than their shareholders. Shareholder actions are becoming more prevalent, as shareholders in their position as “owners” of the company try to influence the board of directors regarding decision-making, directors’ pay, ethical issues etc. But such actions are notable because of their rarity – normally, the managers and directors of a company have decision-making authority and financial control, regardless of share ownership. Thus, not only ownership, but also control and decision-making are equally or sometimes more important for identifying who has the decision-making authority and right to a benefit stream. In analysing property rights, it is important therefore to consider where the decision-making authority and control of a resource lies, as well as tenure and rights.

As discussed in section 2.3, the significance of property rights in establishing reciprocal relationships between rights holders and others has been identified by theorists such as Hohfeld (1966), Carter (1989) and Bromley (1991). In essence, with rights come duties of others to respect those rights. Rights holders are in a reciprocal relation with non-rights holders, being able to exclude them from the resource. Those who are excluded are expected to abide by the property rights allocation; the law protects the rights of rights holders against non-rights holders. By incorporating the notion of reciprocal relations at the heart of a property rights framework, it is possible to include the roles and relationships of non-owners as well as owners into the property rights analysis. Critical analysts have for many years focused on property rights as conferring power on the rights holders over others, in particular in relation to private property conferring the

right to exclude others.⁸ The United States Supreme Court has noted that the right to exclude is “one of the most essential sticks in the bundle of rights that are commonly characterized as property” (cited in Cole and Grossman, 2002:324 fn 14). Zucker (2001) argues that liberal theories of property justify a right to highly unequal property because they claim to treat people as equal to start with, regardless of outcomes. However, Libecap (1989) points out that in many cases, there is no homogeneity amongst bargaining parties, and so they do not start from a position of equality, either in terms of access to information, wealth or political contacts.

Within this conceptualisation of property rights as political institutions, incorporating the concept of rights holders and non-rights holders linked together in unequal power relationships regarding resource allocation and use, distributive conflict can be considered. The distribution of property rights inevitably leads to winners and losers, the winners often being those in the strongest position politically (Libecap 1989) or economically (Boyce, 2002). By exploring the political nature of property rights in terms of concepts of power, access and control, the assumed neutrality of mainstream economic approaches to property rights in regard to efficient resource allocation are challenged. Boyce (2002) argues that the dominant wealth-based approach focuses on the goal of efficiency whilst downplaying the importance of the distributional inequalities of power and wealth. This critique has relevance in considering environmental issues. Redclift argues that it is an illusion to believe that environmental objectives are "other than political, or other than distributive" (Redclift 1984:130) and advocates an analysis of power structures in relation to the environment (Redclift 1987). By focusing on

⁸ Critiques of private property are not new. In *Property, Profits, and Economic Justice*, Held (1980) publishes extracts from essays by legal theorists such as Cohen and MacPherson, the former arguing in 1927 against the injustice inherent in aspects of private property and the latter publishing in 1962 a critique of the possessive individualism of private property. Both pointed to the right to exclude others as being a form of power relationship between owners and non-owners.

distributive issues regarding access to resources, we inevitably have to look at property rights as a multidimensional concept, rather than simply as a range of tenure options (Peluso, 1999).

Not only is the assumed neutrality of economic approaches to property rights challenged in this broad conceptualisation of property rights; so too is the status quo regarding juridical arrangements and property rights. The positive nature of the juridical system means that the weight of law is based on protecting property rights that have already been assigned. Inevitably in such a system, written, contractual rights associated with private property are given greater protection than informal, unwritten rights and rights claims that are often held by the poorest and most marginalized sections of society such as pastoralists and forest dwellers. The limitation of this approach is that it does not consider issues of distributive justice and often fails to recognise informal rights and rights claims outside the juridical status quo or indeed alternative systems of law such as traditional laws (von Benda-Beckman, 2001). The latter are therefore susceptible to be ignored or discounted as not being of equal value as those rights recognised by the juridical system, regardless of issues of distributive justice: "...billions of people, now and in the past, base much of their behavior on respect for property claims that seem either morally arbitrary or clearly unjust" (Friedman, 1994:2). As it tends to be the wealthy and powerful who obtain property rights, this creates powerful vested interests who benefit from maintaining the status quo, regardless of the underlying moral acceptability of such claims (North, 1990; Ensminger, 1996). These vested interests are therefore in a strong position to resist challenges to the status quo property rights arrangements that favour them, or at the very least demand compensation for loss of rights (Boyce, 2002; Bromley, 1991).

By considering distributional conflict and power relations within a concept of property rights, those who have been excluded from the rights to a resource can be explicitly included in the analysis of rights claims and conflict over resources. This has significance in current debates about sustainable development and the environment. According to the influential World Commission on Environment and Development, inequitable access to resources is one of the key impediments to achieving sustainable development (WCED, 1987). According to Rees: "Unless the distributional question is addressed none of the suggested mechanisms (prices, standards, etc.) for achieving sustainable development will be achieved" (Rees 1990:443). Redclift (1987) describes resources as being contested, with decision-making regarding their use being based on the exercise of power and resistance to it. By examining power structures and conflict over use and access to resources, Bryant and Bailey (1997) argue that many environmental problems are social and political in origin. Equitable distribution and access to resources is a theme that has emerged strongly in development and environment literature (see for example, Daly and Cobb, 1990; Ecologist, 1993; Adams, 2001). The validity of the liberal concept of property equating to ownership has been challenged in relation to property institutions and tenure in developing countries (Hirschon, 1984). Rather, it has been argued that the powers and privileges of people and groups are derived from the relationships between people and their roles in society "and not from an anterior or superior idea of property" (Neale, 1985:953). For example, indigenous cultures have been described as conceptualising their relationship to resources based on stewardship rather than ownership, whereby they are part of a tradition of caring for the land and resources, holding it in trust for future generations (Ecologist, 1993). However, others consider that idealised views of communities belie

the fact that within communities, varied power relations exist between the social actors and this is reflected in different claims to natural resources and environmental priorities:

"These factors point to the importance of diverse institutions operating at multiple scale levels from macro to micro, which influence who has access to and control over what resources, and arbitrate contested resource claims" (Leach, Mearns and Scoones, 1997: 6).

There is a growing recognition of the legitimacy of community interest in protecting the environment and natural resources, both as a right and as a pragmatic way to achieve sustainable development (Ghai and Vivian, 1992). Community participation in local resource management has been included on many organisations' agendas for environment and development options. Much of the debate surrounding community involvement in natural resource management has centred on their participation, whilst critics have argued that empowerment of communities is more meaningful in this context. The distinction between participation and empowerment can be viewed at least partly as a property rights issue. Participation on the whole is about bringing local people into mainstream resource management programmes or economic development objectives imposed from above, without devolving control of resources and decision-making to the local level. These projects are still conceived and implemented by external agencies (state or intergovernmental) remote from the local community itself (Utting, 1993), and often with little understanding of local resource control issues (Leach, Mearns and Scoones, 1997). Under this system, status quo power relations are top-down in nature, with an elite within the state or the commercial world dominating the decision-making processes and the management and control of natural resources.

Empowerment, on the other hand, is about local communities having control of the resources and the planning and decision-making processes themselves and has a much more radical basis than participation:

"To call for 'empowerment' of local people is to challenge social structure. Profoundly, one is dealing with 'politics' not 'policies', with 'struggle' and not 'strategy'" (Taylor and Mackenzie, 1992:1).

Thus, empowerment is intimately linked to social and power relations that are often manifest in sets of property rights. As described in section 2.2 above, a growing body of literature gives prominence to common property regimes (CPRs) as viable institutions for managing common pool resources, although such studies have largely been limited to studying their internal characteristics rather than analysing CPRs in a broader external context (Cardoso, 1999), and others suggest that the potential of CPRs is overstated (Campbell et al, 2001). Based on their research in southern Mexico, Blauert and Guidi argue that what is needed is local control of the resource base and empowerment and inclusion in decision-making regarding allocation and use of the resource: "...the provision of means to encourage local 'participation' in resource management is insufficient where local-level **control** over natural resources does not exist" (Blauert and Guidi, 1992:189, emphasis in original).

The significance of communities feeling in control of decision-making through recognition of their property rights has been noted by Mitchell and Carson (2001) in regard to the siting of hazardous waste facilities. Their research found a correlation between willingness by communities to accept such sites in their neighbourhood with recognition of their property rights. In particular, the authors argue that the holding of a binding referendum giving the local community the power of acceptance or rejection is

a clear message by the state and the developer that the community's *de facto* property rights are acknowledged. The authors argue that this path not only often neutralises pre-emptive protest movements, it also creates incentives for state and developer to engage meaningfully with the community regarding benefits and compensation packages in order to persuade them to accept the development and is thus more likely to lead to a positive vote by the community. However, these examples could also reflect asymmetries in knowledge or power, with community members not necessarily having access to all of the information, or with certain community members having inducements to influence outcomes.⁹

In summary, communities living close to common pool resources are involved in complex relationships with other social actors and each other, as well as experiencing an array of institutional arrangements in relation to the resource. If, as is mostly the case, they have no legally recognised, formal property rights to the resource or its benefit stream then the juridical status quo categorises them as being excluded from the resource and obliged to respect the rights of the rights holder. However, this does not mean that they do not have morally legitimate claims to the resource, and may also have informal use rights that have evolved over long periods. In such cases, resources are contested and different rights claims can conflict with each other. However, given the economic, juridical and political systems within which property rights have evolved, the rights of the powerful are often those that are valued most by enforcers of laws. As a means of addressing the legitimate claims of communities, there has been an increasing focus on participatory arrangements for managing resources. Often, though, definitions and practices of participation do not include the devolution of decision-making, control

⁹ See the Solomon Islands case study for examples of how asymmetries in power within communities influences outcomes

and access to the resource to community level institutions. In other instances, the success of community control through common property regimes has been recognised and the circumstances leading to success or failure of such institutions are increasingly the focus of academic research.

This section has discussed some of the complex issues raised when considering the political dimensions of property rights institutions. By focusing on issues of decision-making, exclusion and competing rights claims, a broad conceptualisation of property is proposed that addresses the power relationships between social actors. The following section presents an analytical framework that moves beyond a functional approach to property rights as an array of management options and helps investigate the complex processes surrounding the allocation and evolution of property rights institutions.

2.5 Analytical framework

As described in section 2.2, the property rights regimes approach is useful for understanding the formal and informal rules by which natural resources can be managed. However, it is less helpful for analysing how and why different property rights institutions evolve. Nor does it take account of the political nature of property rights allocations or the fact that there can be competing rights claims to a particular resource. In other words, the dynamic processes by which property rights institutions are chosen and how they change over time require a framework that incorporates complex contextual and temporal aspects of institutional analysis.

This section presents the analytical framework for the thesis, based on a conceptualisation of property rights as complex political institutions described in the

previous section. The framework places property rights institutions within a context of bargaining power, distributional conflict and ideology over time, where these are factors that influence not only the type of property rights institutions that are chosen, but also how and why such institutions are chosen and how they influence other social actors. By adopting this framework, the thesis aims to analyse the complex processes surrounding institutional choice and also how property rights institutions evolve over time. The section discusses the literature that develops a political theory of institutions and then synthesises this with the concepts discussed in the rest of the chapter to develop the analytical framework for the thesis.

Within political economy, institutional theory has developed explicitly to give insights into the complex processes, incentives and constraints that shape the formation and evolution of institutions, where institutions are the formal rules and informal norms that influence human behaviour. Property rights are social institutions that “define or delimit the range of privileges granted to individuals to specific assets, such as parcels of land or water” (Libecap, 1989:1). The economic and political importance of property rights institutions are recognised within this literature, given that property rights not only determine the distribution of benefits, but also confer decision-making authority. The theory provides a framework for understanding how institutions are established and how they evolve over time, where institutions are the formal rules and informal norms in a society. Figure 2.5 summarises the relationship between rules, institutions and the source of their authority, in both formal and informal settings.

Figure 2.5 Rules, institutions and their sources of authority

Rules	Development	Institutions	Sanctions
Formal (Private Property; State property)	State <ul style="list-style-type: none"> • Legislators • Judiciary • Civil servants 	Constitutions Statutes Common law Other governmental regulations	Fines Imprisonment
Informal (Common Property Regimes)	Norms of behaviour <ul style="list-style-type: none"> • Spontaneous • Repeated human interactions • Test of time • Prevailing ethos 	Traditions Customs Moral values Religious belief	Expulsion from community Ostracism Loss of reputation

Source: Pejovich, 2001

Institutional theory has developed explicitly to challenge some of the assumptions associated with neo-classical economic theory. It has been used to explain the persistence of seemingly inefficient institutions and why different outcomes evolve from similar institutional bases. North (1990), whilst recognising the contribution of neo-classical economics to an understanding of scarcity and competition, argues that the assumptions of zero transaction costs, wealth-maximising individuals and complete information do not hold in the real world. He argues that a theory of institutions, and the effect institutions have on the economy and historical development, should assume that individuals act on incomplete, subjective and often erroneous information and that individuals do not necessarily act to maximise individual wealth. According to Ensminger (1996), institutional change does not always move in the direction of increasing efficiency or economic growth and institutional theory attempts to analyse why this is so.

Of particular relevance to this thesis, scholars have broadened the scope of institutional theory beyond market settings and economic growth to consider politics and ideology. For example, Bates (1989) argues that public policies do not evolve due to objective decision-making by government in pursuit of optimal efficiency, but rather as a result of the struggle between competing interests: "...policy is the product of the interested actions of private parties who bring their resources to bear upon politically ambitious politicians and the political process" (Bates, 1989:5). His analysis of the processes leading to Kenyan independence suggests that even when institutions are formed for economic reasons, for example types of property rights to land in the Highlands, they also have political significance, generating positions of power and political incentives. In an interesting development on the theory of common property, Reddy (2002) advances a theorisation of common property institutions as political agents, explicitly negotiating power with the State in order to survive and assert territorial control. She uses the term common property institutions instead of common property regimes in order to highlight the possibility of institutional change and institutional agency. In her case study of communal forests in Guatemala, she found that a particular community was using a community institution in order to express power and authority and thus maintain control over local resources *vis a vis* the State.

Libecap (1989) also stresses the political processes involved in the formation of property rights. He identifies factors such as the relative bargaining power of actors and their underlying value systems (motives) as well as past distributional norms and decisions as influencing property rights institutions. His framework:

"focuses on the political bargaining or contracting underlying the establishment or change of property institutions, and it examines the motives and political power of the various parties involved. This approach is taken because ownership structures are politically determined, and they assign both wealth and political

power in a society. Property rights are viewed here as being more than remnants of past legal and social traditions, although they are affected by them, and as being molded by political manoeuvring and bargaining among many competing interest groups. The stands taken by influential parties and the concessions made to reach political agreement on the allocation and definition of rights critically fashion the institutions that are adopted at any time. Accordingly, it is important to identify the parties involved, the determinates of their bargaining positions and political power, and the factors that can lead either to the establishment of new or modification of existing property rights institutions.” (Libecap, 1989:10-11).

By focusing on the political nature of institutions, scholars are able to study institutional choice and change as a result of asymmetries in power and **distributional conflict**.

Because property rights distribute rewards in society, they therefore provide incentives for some interests to seek changes in property rights institutions whilst others have a vested interest in preserving the status quo. The outcomes produce winners and losers.

The relative **bargaining power** of the parties and competing interest groups (whether individuals or organisations) influences the distributive outcomes, with potential losers having the incentive to impede change, whilst potential winners have the incentive to support and facilitate property rights change (Knight, 1992; Libecap, 1989). Bargaining power is based on factors such as financial and other resources (for example, technological) that can be used to influence outcomes, the knowledge base of the bargaining parties and their links to those with political power. Ensminger (1996:6-7) defines bargaining power as:

“one’s ability to get what one wants from others. It may come from greater wealth or social position or the ability to manipulate the ideology of others...Bargaining power is determined by the preexisting institutional, organisational and ideological configuration...[and] can also be used to effect changes in each of these domains”.

Bargaining power can be based on voluntary and involuntary exchange, the former being for example when wealth is used to effect change and the latter when force is used to compel others to comply with change. The political nature of property rights

institutions is revealed by analysing the way that bargaining parties have different levels of power to influence outcomes, and that those with the most power (financially, politically or technologically) are most likely to get the property rights institutions they want. This undermines the neutral approach to property rights assumed by prevailing economic and legal approaches described in section 2.3 above, that implies the choice of property rights is linked to socially and economically efficient resource allocation. Ensminger argues that, given that some actors have more bargaining power than others, as well as different goals, then the institutions they promote rarely lead to the most efficient outcome for society as whole. The distribution of any gains from institutional change are not necessarily or even usually evenly spread through society, with some being worse off – as Ensminger notes: “This outcome is ultimately related to the preexisting division of power in the society, which may be marshalled to revise the institutional structure to further the gains of small interest groups even more” (Ensminger, 1996:28). North also explicitly breaks any link between institutions and efficiency: “Institutions are not necessarily or even usually created to be socially efficient; rather they, or at least the formal rules, are created to serve the interests of those with the bargaining power to devise new rules” (North, 1990:16) and argues that the bargaining strength of individuals and organisations is fundamental to whether property rights changes occur or not: “only when it is in the interest of those with sufficient bargaining strength to alter the formal rules will there be major changes in the formal institutional framework” (North, 1990:68). Using the same logic in reverse, based on a comparative analysis of four natural resource case studies in the USA, Libecap (1989) argues that vested interests in the status quo will resist changes to the institutional framework that they perceive would make them worse off economically or

politically¹⁰. Bates' analysis (1989) reveals that commercial interests do not necessarily hold the most bargaining power, as shown in the context of a political climate in Kenya supporting redistributive policies that found electoral favour with large swathes of the rural population. This is also echoed in the findings of Libecap (1989) and his case study of 19th century forest lands in the USA: private timber interests failed to establish private rights to large areas of timber lands because such a policy went against the existing precedent of small lots for small farmers and homesteaders that was politically popular and therefore important for Congress members, even if, according to Libecap, not necessarily the most economically efficient allocation.

The role of **ideology** as a factor in institutional choice and change has been identified as a significant one. Ideology is variously described by institutionalist scholars as the subjective models that individuals have to explain the world around them, which are often based on incomplete or erroneous information (North, 1990) and as the values and beliefs that determine people's goals and shape their choices, which can involve altruism as well as self-interest (Ensminger, 1996). North states that such ideologies exist at the microlevel of individual relationships as well as at the macrolevel of organisational ideologies (his examples are religion or communism), and that these theories are influenced by individuals' normative views of how the world should be organised. Any decision-making is thus influenced by the subjective beliefs and motives of the actors and therefore actors' perceptions matter (North, 1990: 137). Ensminger defines ideology as "the values and beliefs that determine people's goals and shape their choices" (1996:5). It is ideology that shapes people's notions of fairness and justice, including the fairness of different systems of rights. This in turn affects peoples'

¹⁰ The four case studies Libecap (1989) analyses are mineral rights, federal land policies, fisheries and the utilization of oil fields.

willingness to comply with particular systems of rights. Ensminger uses ideology as a way of explaining non-rational behaviour, citing the example of people with strong ideological convictions about environmental protection who may advocate changes in property rights that they deem will best accomplish this end, regardless of the economic implications of this change. Her case study of the Orma in Kenya identifies property rights changes that have evolved as a result of a number of factors, amongst which is ideology regarding the proper distribution of benefits within the society (other factors identified are the economic consequences and the bargaining power of various interest groups). Wang (2001), in his case study of the evolution of property rights to fishery resources in Longlake, China, identifies ideology as a key factor in local responses to property rights change. He found that local fishermen used a Chinese proverb “the law does not punish the multitude” to justify continued fishing despite the new state-imposed fishing rights that were introduced. In essence, the proverb “implies that the law is not a law when a multitude of the population whom it intends to rule oppose it” (Wang, 2001:429). However, ideology is not fixed and people’s values and beliefs change over time. Wang explains the Longlake fishermen’s eventual acceptance of the new property rights in large part as a result of shifting ideological beliefs.

A final factor identified as significant by institutional theorists which is worth considering within the analytical framework developed for this thesis is the role of history, in particular the concept of **path dependence**. This is defined as the constraints placed on future behaviour by the existing institutional and ideological structures in a society (Ensminger, 1996). Whilst North (1990) stresses that path dependence does not mean that the future is pre-determined by the past, and that there are always a number of choices along the path of institutional evolution, nonetheless he proposes that the

“cultural inheritance” of a society can influence the ability of bargaining parties to effect institutional change. Libecap sees path dependence as a limiting factor to the range of possible institutional solutions: “Past legislation and court actions help to define both existing property rights and the range of possible institutional changes within the current political system” (Libecap, 1989:22). He cites the example of fisheries in the USA, whereby two legal traditions have, he argues, effectively ruled out the consideration of private property rights to fish stocks: firstly, private rights to fish are traditionally assigned only upon capture; and secondly, the long-standing protection of low-cost access to fisheries by all citizens. Libecap argues that, although the nature of the constraints posed by history depend on the case in question, in order to understand the process of institutional change one has to take account of the “prevailing distributional norms, past political agreements, the precedents they foster, and the vested interests they create” (Libecap, 1989:116). Thus, historical path dependence is an important factor in constraining institutional choice. However, an analysis of historical processes can also help illuminate factors that influence institutional change. For example, changing ideologies and changing power relations between actors over time can all influence institutional choice and change. They can create a facilitative environment for new institutional approaches, enabling modifications to existing arrangements. Ensminger (1996) found that an understanding of past institutions and ideology was an important element in tracing the path of institutional change amongst the Orma of Kenya.

In summary, the theoretical literature identifies four key factors that influence how property rights institutions are chosen and how they are modified over time, see figure

2.6 below. An analysis of these factors can help explain some of the dynamic processes that shape property rights institutions and modifications over time.

Figure 2.6 Factors affecting the establishment and modification of property rights Institutions

• Distributional conflict	- distribution of benefits and decision-making in society; - winners and losers
• Bargaining power	- asymmetries in financial and political resources and knowledge between bargaining parties; - competing interest groups; links to those in political power; - pre-existing division of power in society
• Ideology	- subjective beliefs of individuals/organisations; - different worldviews
• Path dependence	- history matters; - past institutions and ideology can influence future path of institutional evolution

As described above, institutional theory provides a rich analytical framework for examining the complex processes encapsulated in a broad conceptualisation of property outlined in section 2.4. In that section a number of themes were raised, highlighting the complexity of issues related to property rights: control and decision-making; power; exclusion; distributional conflict and competing rights claims, particularly those of local communities, were raised in relation to issues of sustainable development and equitable access to and control of resources. The analytical framework elaborated in this section recognises that by allocating rights and decision-making authority between often competing claimants, property rights institutions are based on distributional conflict, with the losers being excluded from the resource; it allows for the study of actors as heterogeneous bargaining parties, with those with the most power being in a stronger position to influence outcomes and therefore being more likely to get or maintain

property rights institutions that suit their own interests; it treats as endogenous issues of ideology, and that people's or organisations' subjective systems of beliefs and values affect institutional outcomes; and it recognises the significance of past decisions and traditions in constraining and shaping future choices.

Within this framework, prevailing approaches to property rights and natural resources can be seen to be influenced by ideology, with the tragedy of the commons and western liberal ideologies both being influential in justifying a functional approach to property rights based on the efficient management of scarce common pool resources. The framework enables an analysis of the power relations inherent in this functional approach to property rights institutions and it presents factors that can help explain the processes by which property rights institutions are chosen and how they evolve over time.

2.6 Conclusion

This chapter has considered the prevailing property rights approach in environment and development literature, identifying the Tragedy of the Commons model as a highly influential paradigm within which a focus on the institutional arrangements for the management of scarce common pool resources are studied and different property rights regimes are proposed. The chapter then discussed concepts of property that are in common usage, discussing how the dominant western liberal tradition has led to the evolution of political, economic and juridical systems that favour private property rights as an expression of political and economic goals, facilitated by the juridical status quo. The chapter then considered other aspects of property rights, notably issues of power, exclusion and distributive justice. Property rights concepts can be seen to be

ideologically based and to confer power through the distributive nature of resource control and decision making. Using institutional theory, an analytical framework can be adopted that explicitly recognises that the establishment and modification of property rights institutions are political processes, with factors such as distributional conflict, bargaining power, ideology and historical path dependence all being influential. Before using this framework to analyse the empirical cases in Chapters Five and Six, the following chapter looks at forest management through the property rights lens, using the themes raised in the property rights framework elaborated above to analyse dominant approaches to forest management and the implicit property rights assumptions of the dominant paradigm in relation to forest communities' rights and access to forest resources.

Chapter Three

Forest Management and Property Rights

3.1 Introduction

Chapter Two elaborated a comprehensive framework for analysing property rights and natural resources that considers the complex political dimensions of property rights institutions and the processes surrounding institutional choice and change. Within this framework, themes of power relations regarding who has access to the resource, competing rights claims and the nature of conflict over access to and control of resources can be explored. This chapter provides a context to the case studies by considering the dominant forest management regime described in Chapter One, that is timber production and conservation, in the light of the theoretical framework elaborated in Chapter Two. It explores the multiple layers of rights claims to forests, particularly in relation to forest communities' rights and access to forest resources. Section 3.2 argues that the managerial and technical approaches to forest management are based on the ideological models of the tragedy of the commons and the western liberal tradition, which in turn have led to the dominance of forest management regimes facilitating state and corporate control of forest resources. Section 3.3 examines the property rights regimes adopted to manage forest resources, discussing the private property-type characteristics of the dominant timber regime regarding contracts and concessions, the state property characteristics underpinning conservation policies and the growing recognition of common property regimes as viable institutions for managing forest resources in certain circumstances. Section 3.4 argues that this property rights approach masks the fact that forests are contested domains, with forest-dependent communities' rights often at odds with the dominant production/protection regime, despite the

growing interest in community forest management both as a concept and as a policy option.

3.2 Forest management and prevailing property rights paradigms

As described in Chapter One, the dominant forest management regime is based on forests as production units, primarily of timber, and also as providers of globally significant ecological services that need protecting from over-use. As a result, the dominant ownership pattern of forests is that of state control of public forests, accounting for 77% of the world's forests (White and Martin, 2002), that are then subdivided into production or protection forests. The ratio of forests allocated to production compared to protection is 8:1 (Johns, 1997). Thus, the two primary goals of forest management are **production** of timber and **protection** of ecological services, with production being predominant. By adopting the property rights framework proposed in Chapter Two, the managerial and technical approaches to forest management can be seen to have emerged from the tragedy of the commons and the western liberal property rights models, with their underlying property rights assumptions about state regulation or private property-type rights being the most appropriate management options.

The dominant forest management regime takes a centralised, technical and managerial approach to forests that, although being essentially ahistorical in approach, is in fact often embedded in the colonial histories of many forest-rich countries. An historical perspective on how and why property rights to forests have developed is useful because it illuminates the political significance of forests and the processes by which they have become increasingly controlled by a central state. Forest management has evolved from

a European model hundreds of years old. This European model took a utilitarian approach to forests as a source of timber for ship-building and construction, fuelled by expansionist political objectives. Forest management thus became synonymous with timber production, with calculations of sustained timber yields first being applied in Germany over 200 years ago (Rietbergen, 1993). In turn, colonial expansion provided new supplies of timber in both tropical and new world continents. Under this system, areas of forest were identified to be gazetted as part of a Permanent Forest Estate, that is those areas of forest to be held by the state to be managed in the long term as forests rather than being converted to other land uses. The primary goal was timber production, and the secondary goal was conservation of ecological services. For example, a significant concern of the British Empire was how to extract timber in order primarily to ensure a continued supply of teak for shipbuilding (Palmer, 1989) and railway sleepers (Nadkarni, 1989) from its dominions and colonies under a systematic timber harvesting regime that ensured long-term supplies (Duly, 1924; Bryant, 1997). Modern tropical forest management began in India and Burma in the 19th century, and then was introduced to Africa and other tropical forest areas. Forestry management techniques were introduced based on silvicultural practices and research developed by the colonial powers and administered by them (Mather 1990, Palmer 1989). Underlying the technical and political objectives of forestry management was the imposition of state control over the forest resource, with government forestry departments being established to administer forestry policies and protect forest resources for central state objectives, regardless of the existing tenure arrangements, with foresters policing the forest resources, guarding against "illegal encroachment" by local people: "Few colonial foresters saw any connection between forests and the people who lived in, around and off them" (Hisham et al, 1991:5). This reflected western ideas of conservation and

management and often resulted in alienation of forests traditionally held by forest communities, which in turn paved the way for persistent problems and disputes (Mather 1990, Palmer 1989). Under this system, the colonial administration's predisposition would be to ignore or fail to explore adequately the existing tenure systems and to impose instead alien tenure systems that suited the colonial project of providing resources to the colonial power, based on the western liberal concept of ownership of land and natural resources as a source of wealth:

"In each of these countries [in South East Asia] the early 20th Century saw the development of new but essentially similar legal frameworks that conferred upon central governments immense power and control over land ownership. These laws reflected a Western concept of land ownership and political control: land ownership was the root of Western wealth. The pattern of land management was therefore based on this alien Western concept rather than on the traditional Eastern one of land as a communal resource." (Hurst 1990:245)

State control persisted in post-colonial developing countries, as did management objectives, perceptions and techniques, although sometimes with a loss of experienced colonial forestry staff (Hisham et al, 1991; Palmer, 1989). From the 1960s onwards, the development of the commercial forestry sector in tropical countries was seen as one of the main agents for tackling economic underdevelopment, through raising foreign exchange earnings by the export of timber products for the international forest products industry, and was therefore actively promoted by intergovernmental organisations and national governments (Westoby, 1987). Local forest communities, amongst the most marginal in societies, were often blamed for deforestation as national priorities for economic development required the continued central control of forest resources for "sustained" production of timber or conversion to agricultural or other uses (Poore, 1989:151).

The growing awareness of the ecological significance and fragility of forests has led to an increased interest in protection policies as a complementary tool in forest management strategies, although the concept of national parks and wilderness protection first became popular in the 19th century. The establishment of national parks has meant that local people are often excluded from continuing with former activities within the forest on the grounds that they are responsible for forest degradation and over-use (Ghimire 1991). Conservation objectives have been conceived with little or no thought for the role the area demarcated as a park or reserve has played in supporting local livelihood systems. Thus, local people have often been displaced and/or denied access to resources they previously had relied upon for their livelihoods. Not only have they been either at worst removed from parks altogether or often not invited to participate in planning protected areas, there are occasions when they have not known that they were living within a newly created park's boundaries. For example, in Costa Rica's Barra del Colorado Wildlife Refuge, local residents were informed that traditional activities such as hunting and tree cutting now constituted illegal activities and all those who did not possess formal land rights were to be expelled (Utting, 1993). Another aspect to conservation policies is that they have often allowed commercial interests to continue to use the forest resources within a protected area whilst limiting or excluding the activities of local people (Shepherd, 1992; Fortmann, 1988): "Understandably, such conservation is seen as highly unjust by local people and their compliance must be obtained by force" (Shepherd, 1992:9-10).

Thus, the tragedy of the commons model that presents local people as unable to sustainably manage common pool resources and the western liberal approach that property ownership and wealth creation go hand in hand underlie the dominant forest management approach of sustainable production of timber and conservation of

ecological services. This in turn has justified the appropriation of forest resources from forest communities by the state:

"In many countries, the term sustainability has served as an ideological decoy for governments wishing to appropriate forest resources and extinguish local people's customary rights to use them: the latter's forest management systems were labelled "unsustainable" and in need of replacement by "rational" practices" (Rietbergen, 1993:4-5).

This dominant forest management regime linking production and protection goals has associated property rights regimes, and these are described in the next section.

3.3 Forest management and property rights regimes

As described in Chapter Two, the regimes approach to property rights is widespread in the literature on common pool resources. This is equally applicable to forests as it is to other common pool resources such as fisheries, and informs and is informed by forest policy developments. The classic presentation of a regimes approach to forests is of an evolution in property rights institutions, where common property regimes are a feature of the pre-capitalist world, followed by the emergence of state control in Europe and colonial rule in the Americas, Asia and Africa, followed by control by independent nation states in the post-colonial world; in each of these stages primitive, indigenous systems are viewed as giving way, as a matter of course, to state control and modern development through increasing privatization (FAO, 2001b; Mather, 1990).

In recent years, increasing attention has focused on the role of communities in managing forest resources, not least through the wealth of theoretical and empirical research on common property regimes (CPRs) around the world, as described in Chapter Two. This has led to increased dialogue at the policy level on the promotion of community management as a viable institutional option in managing forest resources (see below for

a further discussion on CPRs and forest resources). Nevertheless, as discussed in Chapter One, states claim control of the majority of the world's forests. Analysis of legal tenure of global forests indicates the predominance of state control of public forests, at 77%, followed by 12% being owned by corporate private interests and 7% by indigenous and community groups, with a further 4% of state controlled land being reserved for indigenous and community groups (White and Martin, 2002).

Given that the majority of the world's forest lands are controlled and administered by governments, how the state administers and allocates these public forest lands is significant when considering forest control and management. Governments have in the main chosen to grant access rights and to a greater or lesser extent have devolved management authority to corporate entities via contractual arrangements to harvest timber (White and Martin, 2002, FAO, 2001c). In return for security of access to timber for a specified period of time, companies undertake to pay royalties and other fees to the governments. This system of privatising rights to timber is widespread and most productive forests¹¹ in the world are already licensed to private commercial interests (FAO, 2001a; D'Silva and Appanah, 1993).

The current system of forest management prioritises large-scale corporate development of timber resources; the belief is that industrial timber production needs large areas to be allocated for harvesting and a clear, centralised regulatory framework. The optimal way to achieve large-scale timber production is seen as private property-type arrangements and privatisation is becoming increasingly important in forest management (FAO,

¹¹ That is those forests that contain commercially available timber stocks

2001b; Barbier et al, 1994). The main justifications given for privatisation in the forest sector are summarised in figure 3.1.

Figure 3.1 The main justifications for privatisation in the forest sector

- Inappropriateness of direct government involvement in commercial forestry
- Improved efficiency through the separation of commercial and non-commercial activities
- Improved transparency at the operational level
- Generation of revenues through the sale of state forest assets
- Increased efficiency of forest industry
- Reduced public expenditure

Source: FAO, 2001b

Usually, the status of forests as public forests under state control is retained and private contracts are awarded to corporate enterprises for such activities and services as timber harvesting and processing, forest inventory and monitoring. Less common is the privatisation of the forest itself (FAO, 2001b). As discussed in Chapter Two, the dominance of the private property-type approach to natural resources is based on the premise that private property rights are the most efficient means of allocating scarce resources, and that property rights are the right to a benefit stream. Within the dominant forest management regime this means the allocation of commercial forest resources through tenure, contractual arrangements and rent capture. Thus, states allocate permits for timber exploitation, usually either as licences to log a given volume of timber in a

particular area or, more usually, through allocating forest areas themselves as timber concessions. This is the most commonly adopted tenure arrangement in tropical rainforest countries (FAO, 2001b). Given the size of the permits (both in terms of volume of timber and area), it is usually the corporate sector that is able to exploit timber from forestry concessions, and sub-contracting the timber extraction to another company is common. Increasingly, due to globalisation within the forestry sector it is transnational corporations who control concessions (Dudley et al, 1995; ILO, 2001). Although concession allocation data have traditionally been shrouded in secrecy by governments, information about concession locations and concession holders are increasingly being made public (see Forests Monitor, 1998 and 2001; Global Forest Watch, 2000). The publication of concession allocation data, and the mapping of concession areas, indicate the level to which many highly forested countries have allocated forests to private timber producers.

Within the economic approach to property rights described in Chapter Two, concessions can be viewed as a form of property in terms of a bundle of rights to an economic stream that others have a duty, enforceable by law, to recognize. The usual characteristics of a concession contract confer rights to the concession holder similar to those rights associated with private property regimes, such as exclusive rights to the resource within the specified area, the main difference being that they are allocated for a fixed duration only. Responsibilities associated with the concession award include payment of fees and taxes, and concession holders are bound by the laws and regulations applicable to the development project (FAO, 2001c). Concessions are favoured for allocating large areas of forest and when long term tenure is required to attract private investment. Other types of forest allocation include licences, which are

normally shorter term and for smaller areas of forest. They can be volume-based only, that is they allocate the right to extract a specific volume of timber or other forest products and are usually less complete rights than concessions, with state involvement being greater. There are also permits, which are short-term and often apply to small-scale operations. Sometimes they are used within larger forest management units by governments to authorise specific activities such as annual cutting rights or road building activities. Figure 3.2 summarises the main differences between types of contract. The types of tenure agreement are in descending order of “completeness”, that is those types of rights most closely associated with private property regimes. These are the types of tenure arrangements most favoured by private firms and governments. For governments, they represent an effective way to develop forest resources and thus generate revenues. For companies, concessions provide long-term, secure access to the forest resource without the full responsibility of complete ownership: they are therefore often seen as a cheap way to obtain the rights to timber (Sarre, 2003).

Figure 3.2 Main characteristics of forest allocation contracts

	Tenure type	Use rights	Exclusivity	Transferability	Right to benefit
Private Property	Freehold	Full	Exclusive	Complete	Complete, subject to taxes and laws
State Regulation	Concession	Varies	Exclusive	Sometimes restricted	Complete, subject to charges, taxes and laws
	Licence	Restricted	Varies: often exclusive	Often restricted	Limited to permitted activities, charges, taxes and laws
	Permit	Restricted	Varies: often not exclusive	Normally restricted	Limited to permitted activities, charges and laws

Source: FAO, 2001c

Thus, although the forests remain public forests controlled by the state, and broad management objectives are regulated by forestry and related laws, in the case of forest concessions in particular control of the forest resource passes to the private interest; what happens on the ground is determined to a large extent by the company undertaking the actual timber harvesting. Attempts to define sustainable forest management and operationalise it tend to lead to calls for larger areas to be allocated as individual concessions and with more secure tenure rights. Johns (1997), Whitmore (1991) and Poore (1989) point out that concession agreements rarely cover the length of a full harvesting cycle and the size of concessions is often too small for long-term forest management objectives, resulting in little incentive to implement long-term sustainable management practices. Therefore longer term contracts for larger areas are often advocated in order to achieve sustainable forest management. For example, a concessionaire in northern Congo, using the polycyclic system to harvest relatively few high value timbers dispersed through the forest, successfully argued for the award of

larger concession lands in order to implement sustainable harvesting. The combined size of three adjacent concessions is over 1 million hectares (Forests Monitor, 2001). Given the remote location and lack of official presence, the company operates as a surrogate state locally, providing schooling and medical facilities not only to workers but also to other inhabitants in the area. Such private provision of infrastructure and services is a common feature of concession agreements, particularly in remote tropical rainforest areas. Whether the promised infrastructure and services materialise, or are of a satisfactory quality, depends entirely on the company. In the Congo example cited above, although this company seems to be more responsible than many others operating in the region, nevertheless there have been complaints that certain groups of people have been excluded from using services (Forests Monitor, 2001).

To summarise, private property-type tenure agreements to large areas of forests mean that the private sector control significant forest areas worldwide, with the trend being towards increased privatisation (FAO, 2001b). Governments are therefore increasingly relinquishing control and management of forest resources either through privatisation of forests or state-owned enterprises (as has happened for example in Cameroon and Congo) or more commonly through concession arrangements (FAO, 2001c). The influence of the private sector is acknowledged in the international forest policy arena. The World Bank recognises the private sector as: “the principal financial actor in forest production in most countries. Altogether, the level of activity and influence of the private sector in forests dwarfs that of the international community – and sometimes of the national government” (World Bank, 2003:8). Thus, regardless of the ownership of the forest resource globally, the private sector has become a significant player in controlling and managing production forests.

Notwithstanding the dominant forest management approaches geared towards production of timber and protection of ecological services, increasing attention has been given to the capacity of local communities to manage forest resources successfully as part of the growing literature on the existence and feasibility of common property regimes (CPRs). The attributes of successful CPRs were briefly described in Chapter Two (see figure 2.2), based on the work of Ostrom (1990) and others such as Jodha (1992) and Berkes (1989). The emergence of CPR literature directly challenges the Tragedy of the Commons model and has established the concept of communities' ability to self-govern common pool resources. This concept has since been accepted fairly widely, with international institutions such as the World Bank and the UN FAO not only acknowledging communities' capacity to manage forest resources but also proposing such institutions as appropriate instruments in certain circumstances.¹² CPRs are seen as particularly appropriate in rehabilitating degraded lands and in managing subsistence, non-commercial and locally marketed forest products (Arnold, 1998; World Bank, 2003). Gibson, McKean and Ostrom (2000), developing on previous work, propose two sets of factors that are relevant to whether communities successfully manage forest resources. Developing from the design principles first elaborated by Ostrom (1990), which were based primarily on fisheries and water management, they identify specific characteristics common to forest resources and users in successful forest CPRs. The first set considers the attributes of the forest resource and the second set refers to the attributes of the users. These are summarised in figure 3.3 below.

¹² For recent examples, see FAO (2001b) and World Bank (2003).

Figure 3.3 Factors affecting communities' capacity to manage forest resources

Attributes of the forest resource		Attributes of forest users	
Feasible Improvement	There is detectible improvement in the forest resource	Salience	Users are dependent on the forest for a major portion of their livelihood or for other important variables
Indicators	Qualitative and quantitative changes in forest products accurately reflect general condition of the forest	Common Understanding	Users have a shared image of the forest and how their actions affect each other and the forest
Predictability	Availability of forest products is relatively predictable	Discount rate	Most users have a sufficiently low discount rate in relation to future benefits
Spatial location, terrain, extent	The forest is sufficiently small given geography and communication technology that accurate information of external boundaries and internal microenvironments are known and low-cost monitoring can be arranged	Trust and reciprocity	Users trust each other and relate to each other reciprocally
		Autonomy	Users are able to determine access and harvesting rules without external authorities countermanding them
		Prior organisational experience and local leadership	Users have acquired some level of organisational and leadership skills

Source: Gibson, McKean and Ostrom, 2000

In addition to the attributes of the users described in figure 3.3, the authors describe two others for which there is considerable theoretical debate: the size of the community and

the heterogeneity of the community. Within the CPR literature, there has been a presumption that smaller groups are more likely to organise themselves successfully to manage common pool resources and overcome collective action problems (Hardin, 1990), although case studies also indicate that smaller groups may be unable to monitor forest resources or enforce local rules through the courts (Agrawal, 2000). Linked to the size of groups is the issue of homogeneity. Another presumption in the CPR literature is that the more homogeneous the group, the more likely that there will exist a common interest in managing the resource. However, some have argued that if a heterogeneous group contains individuals with more power and resources than others within the group and those individuals are predisposed to initiating a CPR then they are likely to be able to establish a self-governance model (Ostrom, 1999).

Whilst much of the CPR literature is concerned with describing and analysing the internal characteristics of CPR user groups and resource attributes, there is also a growing interest in the external factors that can hinder or facilitate the success of CPRs (Cardoso, 1999; Ostrom, 1999). Commercialisation of forest resources is seen as a significant deterrent to the success of CPRs. In Ecuador, the emergence of a commercial timber industry has negatively affected the existing CPR institution as some individuals gain more financially from the new form of exploitation (Becker and León, 2000). According to Marchak (1995), community cohesion is difficult to maintain when the temptation of market opportunities is present. Arnold (1998) describes some of the negative impacts of commercialisation on a CPR. These impacts include increased pressures from users both within and outside the CPR, on the basis that the incentives to appropriate the commodity and not co-operate, that is to act in an individualistic manner, become higher. The breakdown in the mechanisms for exclusion and control

have been noted when high value items bring incentives for bribery and corruption. The opportunity for short-term gains can lead to over-harvesting and degradation of the resource. Commercialisation has increased social stratification within the user group, with elites capturing the benefits and diverting resources from subsistence use and users, which in turn increases the likelihood of social conflict, further destabilising community cohesion. The increased value given to the resource as a result of commercialisation attracts privatisers and can lead to encroachment. The state has incentives to capture rent through royalties and resource appropriation.

On the other hand, citing research by McElwee (1994), Arnold (1998) describes the factors that can influence whether CPRs can be successfully established and maintained in a commercial environment. CPRs in commercial settings can be successful if user groups have the right to self-organise, or at least a guarantee of non-interference. If there has been a lack of colonial experience in the past, commercial CPRs are more likely to succeed, and if there has been a history of involvement in commercial production within the community. Strong group cohesion is an important factor, as is the equitable and transparent distribution of benefits within the community, so that they are not captured by elites or the state. If the item produced has cultural significance, such as native handicrafts, then commercialisation within a CPR setting can succeed. McElwee (1994) also found that where appropriate use rules exist or can be developed and where competition for the resource is limited and has not proved problematic in the past then commercialisation within a CPR setting could succeed.

In practice, CPRs tend to be promoted and sustained in forests where there is limited commercial interest (FAO, 2001b; Arnold, 1998). For example, in Nepal, where

community forestry initiatives have had wide external support, over 12,000 Forest User Groups (FUGs) manage about 15% of Nepal's total forest area. However, most of the activity is concentrated in the mid-hills region, where there are few commercial timber species, and the forest is managed primarily for subsistence use. In the Terai region, which contains most of Nepal's commercial timber species, FUGs are far less common (Satyal Pravat, 2004).

In summary, the CPR literature establishes the theoretical and empirical case that communities can self-organise to successfully manage forest resources. This is being accepted by international forest policy-makers such as the World Bank and FAO, and therefore common property regimes for community forest management have become one of the policy options discussed when assessing the most appropriate form of institution for managing particular forest resources. Within this global forest policy context, community forest management objectives tend to be viewed as non-commercial, such as rehabilitation of degraded forest lands or provision of subsistence goods and services such as fuel wood, range and fodder, or products aimed at local or specialised markets, for example native handicrafts. CPRs are therefore increasingly seen as a complementary institutional option to state regulation or private rights, appropriate to multiple resource use goals rather than single resource extraction, and as such are not seen as competing with the dominant forest management regime. This reflects the functional approach to property rights regimes described in Chapter Two, that sees property rights regimes as management tools with CPRs as one of the options available to efficiently manage forest resources in the right circumstances.

So far this chapter has discussed the dominant technical and managerial approaches to forest management that have inherent property rights assumptions based on the predominant models identified in Chapter Two and discussed above, namely the tragedy of the commons model that assumes the inevitability of communities overexploiting common-pool resources in the absence of regulation or privatisation, and the western liberal tradition that sees private property rights as the most efficient means of allocating scarce resources to maximise wealth. The CPR literature has successfully provided an additional management option to regulation or privatisation. This functional approach to property rights regimes presents a range of non-competing institutional options for management of forest resources depending on clearly identified objectives. Thus, commercial timber production has been identified by policymakers as the predominant goal for forests and private property-type arrangements are widely accepted as the most efficient way to achieve that goal, including in public forests controlled by the state. In order to protect biodiversity and other environmental goods and services, relatively large protected areas have been established where human activities are prohibited or reduced, and these have been realised usually under direct state management, although management functions are increasingly being privatised. In both these cases, the role of forest-dependent communities in managing forests has traditionally been marginalized. Community forest management is increasingly being recognised as a viable management option in small-scale, non-commercially productive or low conservation value forest areas, that is those forest areas not identified as being part of the production/protection management regime.

As discussed in Chapter Two, the functional approach to forest management and property rights does not address the political dimensions of property rights issues, such

as power relations, competing rights claims and distributional conflict. The next section uses these themes to help understand more fully the complexity of property rights and forest management that is masked by the dominant approach described above.

3.4 Forest management, property rights and power

This section argues that the managerial and technical approaches to forest management disguise the fact that forests are often contested domains, with forest-dependent communities' rights often at odds with the dominant production/protection regime, despite the growing interest in community forest management both as a concept and as a policy option. This section explores the multiple layers of rights claims to forests and the complex web of inter-relationships between social actors within the political conceptualisation of property explored in Chapter Two. By defining property rights as relationships between social actors, rather than as relationships between people and things, issues of power, control, access to resources, exclusion, participation, empowerment and differing, sometimes competing rights claims, become central to the focus of analysis of forest management problems and solutions, challenging the status quo of the dominant forest management regime. This section develops these themes by reference to the forest literature, in particular by investigating the limitations of the implicit property rights assumptions of the dominant forest management regime in relation to forest communities' rights and access to forest resources.

As described in sections 3.2 and 3.3 above, the dominant forest management regime is based on the view that forests are production units for timber and, to a lesser extent, storehouses of biodiversity and other ecological services that need protecting from human interference. The inherent property rights assumptions of the dominant regime

are that large areas of forest are allocated to timber production and protected areas. As a result, state and private enterprises dominate forest management and control in terms of power structures and the consequent influence on forest tenure and who has access to forest resources. Indeed, timber industry chiefs are often closely associated with political figures (Whitmore, 1991; Hurst, 1990) and bribery and corruption in the forestry sector have been recognised as being prevalent in many countries, for example in the allocation of timber concessions (FAO, 2001a; Contreras-Hermosilla, 2001). Thus, access to forest resources invariably has political significance rather than being simply the interplay of market forces, with commercial interests tending to be the most powerful voice in influencing state decision-making (Bryant, 1997; Shepherd, 1992). The status quo regarding who has rights to forests is therefore dominated by powerful vested interests in the form of the state and the private sector, and these vested interests are resistant to change, making reallocation either extremely difficult or politically fraught (Dubois, 1997; Marchak, 1995).

Status quo property rights are protected by the juridical system and non-rights holders are legally obliged to respect the rights of rights-holders of the resource, regardless of the moral legitimacy of the allocation decision or informal claim rights. Highlighting the political nature of forest allocation challenges the economic and natural science foundations of the dominant technical and managerial approaches to forest management. The limitation of an economic approach to forest allocation, based on the principle of efficient allocation of bundles of rights to a benefit stream, is that it takes property rights assumptions as a non-contested given, not considering the legitimacy of the allocation decision, nor the basis upon which non-rights holders have been excluded. Natural sciences have only limited scope to consider institutional and other

social constructs such as property rights. Both economic and natural science approaches have underlying assumptions (either explicit in the case of economic approaches or implicit in the case of natural science approaches) about control of the forest and the objectives of forest management as described in section 3.2 above. These property rights assumptions are themselves framed by western approaches to property rights as being superior to other approaches (Hurst, 1990; Neale, 1985), and therefore they view alternative property rights systems and forest uses as anachronistic marginal activities (Mather, 1990). At the forest level, such approaches favour property rights arrangements that are top-down in nature, disregarding other rights claims and the fact that forests are often contested domains:

"...state and national governments have no particular reason to acknowledge the rights or competence of community foresters since historically central governments have competed with local communities and local people for control of forest land. All over the world, for centuries, peasants and the state have been slugging it out in the forest" (Fortmann and Bruce, 1988:107).

Within the dominant forest management regime, forest communities' informal rights or rights claims to forests are often not recognised because the basic premise of the land use decision favouring timber exploitation or protection is accepted as the status quo. As a consequence, conflicts at the forest level are often ignored or downplayed, for example regarding the legitimacy of the timber concession system or its compatibility with community forest management and community claims to the same areas of forest. In Indonesia, the forest concession system that covers most of the productive forest in the country is being challenged by Indonesian NGOs who claim that the concession system itself is based on illegal appropriation of forest resources from local communities with traditional rights to the forest. Research by Peluso (1992) in Indonesia indicates that conflict at the forest level is in essence a conflict between competing rights claims, whether formal or informal. Indeed, resistance to colonial and

post-colonial expropriation of forest resources is an ongoing process, with strategies of resistance being common even amongst those with very little power (Bryant, 1997; Pathak, 1994; Peluso, 1992). In India and Brazil, the well-documented struggles of the Chipko movement and the rubber tappers respectively are in essence about rights to resources at the local level (Cardoso, 1999; Bandyopadhyay, 1992), although these local struggles are often appropriated by environmentalists; this can have the mutually beneficial effect of dressing politically charged notions of distributive justice in the less threatening language of environmental protection¹³.

By explicitly considering the power relations inherent in the property rights approaches of the dominant forest management regime, the influence of forest communities can be seen to be very small compared with the vested interests that benefit from the status quo property rights, namely the private sector and state interests. Forest communities often have strong informal rights and rights claims to forest resources, and these are often the same forests for which formal rights have been awarded either for production or protection.

Notwithstanding the increased interest in community forest management as a concept and as a policy option, as described in section 3.3 above, the amount of forest held under community control is still relatively small. As shown in Table 1.2, research by White and Martin (2002) indicates that a total of 11% of forest lands globally are administered by or owned by community and indigenous groups. When disaggregated, the figure rises to 22% in developing countries but is only 3% in developed countries. However, whilst such data are a useful indicator of broad trends, they only present the

¹³ See Chapter Six for a discussion of this in the British Columbia case study. Although, as is shown in the Solomon Islands case study in Chapter Five, the two are not always compatible, for example when communities want to develop their resource.

status of forests recognised by states' juridical systems and do not reflect informal rights or rights claims, nor other tenure arrangements. In Mexico and Papua New Guinea, which have very high levels of community ownership of the resource (80% and 90% respectively), in both countries private sector interests control large parts of the forest under private property-type contractual arrangements, such as concessions (Alatorre and Boege, 1998; Filer, 1998). Of the 77% of public forests administered by government globally, much of this is allocated to private interests as concessions and other contractual arrangements, for example in Central African countries and Canada, whereas these same forests will also have community rights claims to them. Therefore, in many instances, there are layers of use rights and rights claims to forests that overlap and conflict, but this is not reflected in official figures. Informal local rights are often not officially recognised or accounted for, especially when they conflict with government-sanctioned rights. By using the property rights framework elaborated in Chapter Two to analyse communities' rights and access to forest resources, these issues and a number of others become apparent, including issues of participation versus empowerment and an understanding of the interactions between communities and the production and protection regime, as discussed in the following paragraphs.

Often, the language of community forest management is used as a means of encouraging community participation in broad forest management processes, rather than assigning rights to communities for self-governance of forest resources (D'Silva and Appanah, 1993). This relates specifically to the issue of participation compared to empowerment, the difference between the two often being about whether property rights are assigned to communities or not, and the power they have in decision-making and control. Participation through mechanisms such as informing people about policies and

trying to involve them as actors in community forestry, social forestry and agroforestry programmes is no guarantee of success (Utting, 1993; Poffenberger, 1990). The reasons for this failure are often associated with the continuing top-down nature of the techniques and policies and with a failure to consider the underlying property rights issues (Utting, 1993; Gregerson, Draper and Elz, 1989; Cernea, 1988). The problems which these policies are intended to resolve, such as soil erosion, poverty, fuelwood requirements, poor agricultural land, are often viewed as being technical in nature, requiring technical solutions being imposed centrally by national governments or international aid agencies, often in ignorance of the actual needs and structure of the communities who are involved (Leach, Mearns and Scoones 1997; Gregerson, Draper and Elz, 1989) or the appropriate tree species for the site (Sargent and Bass, 1992). Local people see themselves as becoming unpaid forest guards or labourers in nurseries or plantations (Utting, 1993). Shepherd (1992) identifies one cause of negative feelings towards social foresters being as a result of local people perceiving that the government protects standing timber whilst they have to plant their own trees. These top-down policies also rarely consider existing tree tenure arrangements within a community and these tenure arrangements in relation to that of the land itself (Fortmann, 1988), whereby local people will be reluctant to plant trees if they do not have the rights to the use of the trees. Schemes are often introduced by those institutions that have in the past incurred the mistrust or outright hostility of the communities they are now trying to involve in these projects (Ngaiza, 1991). They are therefore treated with scepticism and lack of enthusiasm by groups, many of whom are already marginalised within society (Utting, 1993).

Qualitatively, community forest management is often disadvantaged or undervalued because, on the one hand, even in those instances where communities are allocated tenure to forest lands, they are often given access to degraded or non-productive forest lands (Arnold, 1998; FAO, 2001b). In these instances, community forest management is seen as a cost-effective way of rehabilitating degraded land or providing goods and services to poor rural communities whilst the priority of timber production remains under the control of state and private sector interests. On the other hand, the most productive forests or those with the highest conservation value are retained by the state as production or protection forests, often regardless of existing rights claims by forest communities (Scherr et al, 2003). This leads to conflict and the undermining of forest communities' rights to access forest resources they have often held for centuries.

Although not extensive, the literature on interactions between logging operations and local communities reflects some of the issues raised in a comprehensive property rights approach, including forests as contested domains, with overlapping and competing rights claims. Within the timber regime, there is growing recognition of good practice in forest management addressing community usufructuary rights within management plans and operational practices (Higman et al, 1999). However, the power of veto, which as discussed in Chapter Two is an important element in community control and decision-making, is rarely accepted in actual timber management policies and operational plans.¹⁴

¹⁴ However, principle 3 of the independent certification scheme established by the Forest Stewardship Council (FSC) regarding Indigenous Peoples' Rights specifically states that "*The legal and customary rights of indigenous peoples to own, use and manage their lands, territories and resources shall be recognised and respected*" (emphasis added). This is one of the main reasons why the FSC certification scheme is considered by environmental groups to be the most appropriate amongst the plethora of schemes currently operating.

In Guyana, concessions awarded in the early 1990s to timber companies such as the Malaysian-owned logging companies Barama Company Limited and Berjaya Group overlapped with indigenous communities' pre-existing titled land rights and rights claims to land that they had inhabited without title for hundreds of years. The concessions were awarded without prior consultation with the communities and the process was widely criticised by indigenous and Amerindian associations and international environmental groups (Colchester, 1997, Forests Monitor, 1995). In response to criticism, one of the companies, Barama Company Limited, contracted a forestry consultancy firm to develop a management plan and undertake an environmental and social impact assessment of the operations. Published in 1993, this report highlighted the fact that the majority of Amerindians living within the concession were not living in legally designated Amerindian lands (ECTF, 1993). The report pointed to positive impacts expected by the communities, such as the expected employment opportunities and provision of improved infrastructure, schools and health services. However, it also indicated a number of serious potential environmental and social consequences of the company's operations that would negatively impact the local populations, such as loss of traditional sources of food, shelter and livelihoods; friction with local communities and increased conflict within communities over jobs and markets; increased hunting pressure; pollution. In a survey conducted in 1994 by the Amerindian Peoples Association (APA) and the Forest Peoples' Programme, of the hundreds of indigenous people interviewed who lived within the Barama concession, many had not even heard of the company or the fact that they now lived within a logging concession: "so we just live on their concessions now. We're like refugees. We have no place" (cited in Colchester, 1997: 122'). Even in instances where local communities negotiated deals with logging companies, the outcome was not as they had

predicted. The Orealla community in Guyana negotiated contracts with Barama company and a Guyanese businessman to supply logs from their lands at prices three times higher than those offered by local traders (Sizer, 1996). However, problems soon arose within the community as they realised that production and transport costs were higher than anticipated; buyers changed shipment dates; long delays in payment led to high interest rates on credit for families locally; and greater economic insecurity. As a consequence, family diet suffered because men who normally undertook farming and food provision were involved in the supply of timber so food had to be bought and available cash decreased rather than increased. In addition, because extraction rates were high, timber stocks were rapidly depleted. Tensions within the community increased and women in particular complained that “log fever” was causing the neglect of basic community maintenance and farming activities (Colchester, 1997; Sizer, 1996).

In Cameroon, conflicts between logging companies and forest-dwelling communities are common over forest lands that, notwithstanding their legal status as state forests allocated as a forest concession, local people regard as still being their traditional village forest areas to be cultivated and used to harvest forest products. Under customary use rights in Cameroon, village territories are made up of three distinct areas: the village itself, consisting of dwellings and crop plantations, the forest close to the village up to a distance of about three kilometres away, and which is considered to belong to the village exclusively under a mix of individual and communal rules, and the distant forest, extending from around three kilometres to up to twelve kilometres away. This latter tends to be held in common by several villages with accepted rules generally being respected (Pénelon, 1997). In one location, a company that had been allocated a forest concession ‘repeatedly blamed’ the Ministry for Environment and Forestry for being

unable or unwilling to prevent local people from ‘uncontrolled’ forest destruction for agricultural purposes (Steinhauer-Burkart et al, 1997:21). Elsewhere in Cameroon, conflict between local communities and forestry companies are a regular occurrence, with complaints that promised infrastructure and other developments do not materialise. Also, conflict over particular trees is common: the moabi tree is one of the largest found in the Congo basin and is traditionally highly prized locally for its oil and edible fruits, providing subsistence and local cash products. However, it is also a high value timber species in great demand particularly in Southern Europe and thus conflict over moabi trees between villagers and companies is common, particularly in Cameroon (Schneemann, 1995). Often conflict is caused within communities, when certain individuals benefit from “gifts” to facilitate forestry operations, or when negative impacts fall inequitably on certain members of the community such as women, children and the elderly who rely more heavily on non-timber forest products (Lapuyade et al, 2000).

Notwithstanding customary rights, Cameroon’s forest is state-controlled, and is divided into permanent and non-permanent forest estates. The former is primarily allocated as large forestry concessions up to 200,000 hectares to private interests whilst the latter contains the smaller forestry exploitation licences known as *ventes de coupe*, consisting of areas of up to 2,500 hectares, and community forests. Whilst the 1994 forestry law makes provision for the establishment of community forests, in fact these are much more difficult to establish than commercial forestry operations and thus rights to forest resources are skewed against local communities and in favour of private interests. The large forestry concessions, known as *Unités Forestière d’Aménagement* (UFAs), require management plans but can (and do) operate without them having been drawn up and

implemented. The smaller forestry licences, *ventes de coupe*, do not require management plans at all. On the other hand, community forests cannot be established without a management plan and there is considerable bureaucracy and costs associated with identifying forest areas and complying with the legislation (Egbe, 1997). Thus, whilst commercial operations in the hands of private interests can be operational within a few weeks or months, it takes at least one year to establish a community forest (Pénelon, 1997). Also, whilst community forests are required to be at the periphery of a village and in forests not already allocated to forestry operations, there is no corresponding limitation preventing the establishment of commercial forestry operations on the periphery of villages (Egbe, 1997). This has resulted in a number of applications for community forests going through the lengthy application procedures, only for the same area of forest to be allocated to commercial interests in the meantime (Forests Monitor, 2001). Even when community forests are established, it is only the management of the resource which passes to the community, under the operational guidelines established by the state; the state itself remains the *de jure* controller of the resources and retains the right of forfeiture if the obligations of the agreement are not upheld (Egbe, 1997). Even the World Bank, which was instrumental in the drafting of the 1994 law, has identified the unfair advantage afforded private interests and the lack of involvement of local communities in drafting forest policy. Its Operations Evaluation Department 1999 review of the Cameroonian forestry sector stated:

“the international logging companies that dominate the sector continue to have a free hand in the development and use of the forest resources of Cameroon. Local communities were left out of the reform process, despite the declared objective to include them in forest resource management” (cited in World Rainforest Movement, 2002: 49).

In other forest-rich countries with concession systems, conflict and hardship for local communities are also common. In Cambodia, most of the areas that the state has granted

as timber concessions are traditional common property areas to which communities have always had access to collect forest products. As a result of the designation as concession areas, these traditional rights are under threat or are being denied, causing significant hardship to local people and leading to conflict with logging companies (ARD, 1998). In the East Malaysian state of Sarawak, which is the largest producer of timber in the country, there have long been tensions between indigenous communities and the state and forestry companies. Despite the 1957 Sarawak Land Code recognizing and protecting indigenous land rights, they are often ignored in the allocation of licences to forestry companies, leading to conflict and hardship for indigenous communities (Aiken and Leigh, 1992). In particular, the practice of only recognizing native customary land as being that which is being cultivated at the time in effect robs local communities of their fallow lands and hunting territory, confining them to smaller parcels of land that are not ecologically suited to continuous cultivation. Also, trees, gardens and crops are often damaged by logging operations, and water sources are polluted. As a result, there is a long history of conflict between communities and forestry companies, with blockades and direct actions as well as legal challenges being mounted on a regular basis (World Rainforest Movement and Forests Monitor, 1998).

These examples demonstrate that forests remain contested domains, with multiple layers of rights and rights claims overlapping and often conflicting. However, the powerful vested interests that control the legal tenure and decision-making are the private sector and the state. In this system, forest communities' rights are often undervalued, whilst commercial interests predominate the forest management decision-making environment.

3.5 Conclusion

This chapter critically examines the dominant forest management regime using the conceptualization of property rights elaborated in Chapter Two. The chapter not only studies the regimes by which access to forest resources are allocated and managed but also looks at the ideologies underlying the dominant forest management regime. By defining property rights institutions as relationships between social actors (both rights holders and non-rights holders), the political dimensions of forest management can be explored in terms of unequal power relations, exclusion and competing, often conflicting rights claims. Within this property rights framework, the chapter explores the managerial and technical approaches to forest management that are based on production of timber and protection of environmental services. At the forest level, this involves property rights based on the western liberal model, favouring private property-type arrangements for timber production, and the tragedy of the commons model that supposes the inevitability of resource over-exploitation in the absence of state regulation or privatisation. The inherent property rights assumptions of the dominant forest management regime are that forests need to be appropriated by the state and bundles of rights to timber assigned to commercial interests as the most efficient way to allocate resources, and that certain high conservation value forests need to be protected from human activity, usually under direct control of the state.

The limitations of the property rights assumptions implicit in the dominant forest management regime are that the rights of forest-dependent communities are rarely considered. By expanding the property rights analysis to include issues of distributional conflict, those who are excluded by specific tenure arrangements, power relations and competing rights claims become central to the investigation. Within this framework, the

prevalent approach to property rights by the dominant forest management regime can be seen as masking the fact that forests are contested domains, with forest-dependent communities' rights often at odds with the dominant production/protection regime, despite the growing interest in community forest management both as a concept and as a policy option. The dominant forest management model ignores the historical appropriation of forest resources by the state, a process that in many cases extinguished or over-rode the pre-existing rights of local and indigenous communities. Despite this process, forest communities have continued to exercise their traditional rights to forests, often bringing them into conflict with the state and commercial interests. Concession management and other contractual arrangements introduced by the state to devolve management and control of the forest resource to the private sector have further undermined community rights to forests and created multiple layers of use rights and rights claims to the same areas of forest. By addressing issues of power and the often conflict-ridden inter-relationships between social actors (both rights holders and non-rights holders), decisions about resource access and control can be seen within a political context. This in turn challenges the assumed neutrality of economic approaches to property rights and highlights the difficulty in changing the status quo which is supported by powerful vested interests.

Chapters Two and Three have analysed the political nature of property rights in order to illuminate complex issues surrounding access to and control of forest resources. Within this framework, a number of key questions can be posed to be explored by empirical research: how has the dominant forest management regime evolved? What are the property rights implications of the dominant forest management regime for communities? How do communities and the dominant forest management regime

interact? These topics are investigated in the case studies presented in Chapters Five and Six, which analyse empirical evidence gathered in two locations: the Solomon Islands and British Columbia, Canada. First, the next chapter discusses the methodology used, within the analytical framework outlined in Chapter Two. It presents the rationale for adopting a case study approach to further investigate these questions and why these particular locations were selected.

Chapter Four

Methodology

4.1 Introduction

This chapter elaborates the practical research design in relation to the theoretical framework described in Chapter Two and the research questions posed in Chapter Three. The next section synthesises the theory and research questions in relation to the aims of the thesis. Section 4.3 discusses the rationale for adopting a case study approach and the selection of the Solomon Islands and British Columbia, Canada as the locations for the case studies. Section 4.4 discusses the operationalisation of the research, including data sources and issues surrounding triangulation and comparability.

4.2 Aims, theoretical framework and research questions

Chapter One identified the aims of the thesis: firstly, to investigate the implicit property rights assumptions of the dominant forest management regime, particularly in relation to local forest communities' rights and access to forest resources; and secondly, to explore how and why property rights institutions are chosen and how they evolve over time. A theoretical framework was elaborated in Chapter Two that focuses on the political dimensions of property rights, raising issues of power relations, exclusion and competing rights claims. In order to develop an analytical framework to study these political dimensions of property rights institutions, the literature on institutional theory was used. This literature identifies four key themes that influence how and why institutions are chosen and evolve over time: distributional conflict; bargaining power; ideology and historical path dependence.

Chapter Three explored property rights and forest management, conceptualising forests as contested domains with different, often competing, claim rights to forests. The chapter identified three key research questions to be answered through empirical research: how has the dominant forest management regime evolved? What are the property rights implications of the forest management regime for communities? How do local forest communities and the dominant forest management regime interact? By investigating these questions, the aim of the empirical work is to understand how forest communities are affected by and interact with the dominant forest management regime, namely the state and private sector, regarding access to and control of the forest resource. As discussed in Chapter Two, issues of control and decision-making are as important as ownership in order to fully understand the property rights implications of forest policies and management practice (Blauert and Guidi, 1992; Bromley, 1991). The research strategy is therefore to understand the processes surrounding the development of property rights and forest management, in particular as they relate to local forest communities. The term ‘local forest communities’ is used in the thesis to mean groups of people living in forest areas and who have a close economic and social connection to these forests, either as a source of livelihoods or as a provider of environmental goods and services, for example potable water and soil stabilisation, or both. The term is not intended to imply that local forest communities are necessarily homogeneous or are socially cohesive. Whilst using the term to refer to groups of people living in villages or settlements in forest areas, the author recognises that individuals can identify themselves as belonging to several different communities, and allegiances need not be only place-based.

Issues of power, control, distributional conflict and competing rights claims, as identified in Chapter Two, are central to the analysis of forest management undertaken in this thesis and are fundamental to an understanding of where property rights lie and how property rights change. Methodologies based on economic approaches to forest management have only a very limited scope for dealing with such issues. Natural sciences by their nature tend to ignore institutional and other social constructs such as property rights, assuming that control of forest resources is uncontested. What these approaches have in common is that they hold underlying assumptions regarding decisions about who should control the forest and the objectives of forest control and management, without addressing in any detail the contested nature of such authority and decision making, conflicting rights claims, distributional conflict, disputed access and control. Such issues invariably are political in nature. In the case of forest management, "forest use can only be fully understood in relation to the political processes which condition forest access" (Bryant 1997:2).

In order to analyse the political and dynamic nature of property rights institutions, Chapter Two identifies key analytical factors identified by the institutional theory literature that influence institutional choice and change. These factors are distributional conflict, bargaining power, ideology and historical path dependence. By using these factors to guide the analysis of the empirical data, the research aims to provide a framework for comparison and to investigate the complex and dynamic processes by which property rights institutions are chosen and how they evolve. The aim is therefore to examine the complexity of the web of evolving relationships within and between social actors, rather than casting forest communities as passive victims (Pathak, 1994; Utting, 1993). It also aims to avoid a structuralist approach that assigns fixed roles and

stations to categories of social actors within a hierarchy of influence that implies a homogeneous response by groups of social actors. Rather, the aim of the research is to explore the extent to which social actors interact with each other in regard to forest use and management; and it assumes that the inter-relationships between social actors are based on heterogeneous responses that are also significant in shaping forest policy. In his study of forest practices in India, Pathak (1994:14) describes the complexity of such relationships:

"The relationship between the state and peasants is not a macro-micro duality but a spectrum of linkages running down from the state and the industrial-urban complex to the forest-dwelling communities. The state finds its extension in the elites of a stratified peasant society. This elite strata is characterised by a Janus-faced contradictory character: it is an outpost of the state and a part of the village community".

Thus, the thesis specifically aims to avoid the view of forest communities as passive victims of policy and decisions rather than having a role to play in influencing forest control and use, however limited their power may be. In their work on Burma, India and Indonesia, Bryant (1997), Pathak (1994) and Peluso (1992) unpack the layers of inter-relationships between and within groups of social actors specifically within the context of complex political and social processes. By defining property rights as an expression of reciprocal relationships between social actors, whether rights holders or non-rights holders (see Chapter Two), this thesis explicitly recognises the power relations inherent in such relationships. Thus, it is important in empirical work to look not only at where the legal rights (tenure) are vested to a piece of forest and its accompanying land (both of which could be under the legal control of separate parties), but also to look at who has the day to day access and use rights to all or part of the forest and/or its land,

whether usufructuary rights are vested separately in another group and whether there are competing rights claims to the forest resource.

4.3 Rationale for the case study approach

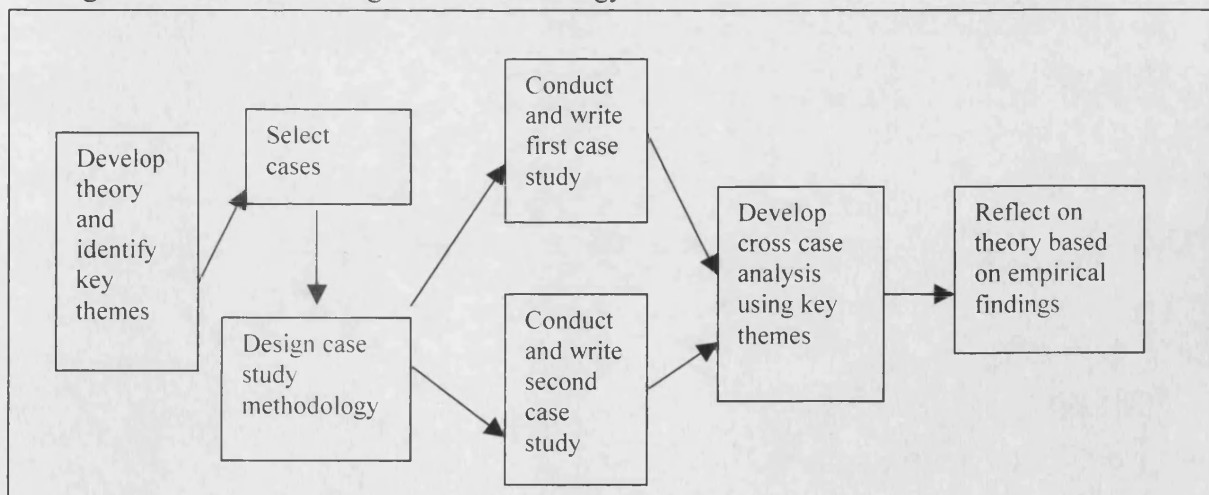
As well as explicitly recognising the political and dynamic nature of institutional choice and change, through an analysis of distributional conflict, bargaining power, ideology and historical path dependence, the analytical framework also provides a useful tool for the analysis of empirical case studies, as can be seen from the literature.¹⁵ By identifying key themes that can be investigated in different empirical settings, the framework allows scope for the individuality of each case to be explored whilst at the same time providing analytical tools for comparison. Libecap's 1989 comparative study of four natural resource cases in the USA demonstrates the value of such an approach, in that the themes outlined above not only provided an explanatory framework for each individual case but also allowed for comparison across the cases, which in turn provided further insights into the theoretical approach. The analytical framework therefore offers much of value to a study of property rights institutions and the management of forest resources, in particular for examining the political nature of forest management and issues of how the dominant forest management regime has evolved.

Given that the thesis aims to study the complex processes underlying property rights and forest management, the case study approach has been identified as being the most appropriate for a number of reasons. Case studies are useful for focusing on analytical

¹⁵ Of the key texts on institutional theory referred to in chapter two, most are based on the study of one or more case studies: Bates (1989) and Ensminger (1996) both present case studies from Kenya; Wang (2001) from China; Reddy (2002) from Guatemala. Libecap (1989) presents four sectoral case studies, all from the USA. North (1990), on the other hand, uses case studies to illustrate theoretical points in his seminal theoretical contribution to institutional theory.

social units and social processes rather than on individuals in the round (Hakim, 1987). They can answer “how” and “why” questions about contemporary events over which the researcher has no control (Yin, 1994). Where access to data can be difficult, case study research enables a number of sources to be consulted and it is a useful tool for examining processes and relationships. The case study approach is common in the literature on forests, as this methodology lends itself to location-specific descriptions and analyses. This thesis presents data from two case studies, as this allows for comparisons between historical processes and contemporary events in order to investigate common themes in different situations. This is akin to literal replication (Yin, 1994), which is approached by developing theory and identifying key themes, selecting the case studies to predict similar results and designing the case study methodology, conducting each case study, writing individual reports, presenting a cross-case analysis using the common themes which in turn can be used to modify the theory. This approach is summarised in figure 4.1.

Figure 4.1 Research design and methodology



Adapted from Yin (1994)

The two case studies selected were the Solomon Islands and British Columbia. There were a number of reasons for selecting these two case studies. In both cases, forest management, and in particular timber production, was the main natural resource issue in the 1990s, generating much heated debate in both places. In both locations, sections of civil society mobilised against the timber industry and called upon the state to review forest management policies.

In the Solomon Islands, although forest tenure was communal, the state had established policies, aided by international donors, to encourage an industrial forestry sector.

However, there was resistance to this:

“It is a sad thing to learn that the leaders tend not to be aware of the people’s concerns and keep on striving their very best to convince people of Russells to come to some sort of agreement in order to give an okay for the company to carry out logging on the island.” (Ernest Bhuli Kolly, letter to the editor, Solomon Star 17th May, 1995).

In British Columbia forest resources were state controlled, with an extensive concession management system in place. Civil society protests against the prevailing forest management approach reached new heights in the 1990s:

“The government has allowed multinational corporations such as MacMillan Bloedel the rights to rape and pillage our forests. What power do the people really have? What legal, democratic options are left?...Civil disobedience is the refusal to obey certain government laws or demands for the purpose of influencing legislation by nonviolent public actions.” (Jane Saville, representing herself at the Clayoquot Sound mass trials, British Columbia, September 14, 1993, cited in MacIsaac and Champagne, 1994).

Thus, in both locations, the 1990s marked a period of heightening tension between social actors regarding control and use of the forest resource. For this reason, both areas provide exemplary case studies (Yin, 1994) of processes and relationships relevant to an

examination of the issues surrounding property rights and forest use and management, such as distributional conflict, competing rights claims and power relations between rights holders and non-rights holders. These two case studies are interesting comparatively not only because of the processes which a property rights analysis can expose but also because of these processes in relation to land and forest tenure itself. Tenure in the Solomon Islands is almost the diametric opposite of tenure in British Columbia. In the Solomon Islands, 87% of land and forest resources were held under customary tenure that is formally recognised by the state. In British Columbia, 94% of the forest resources were public forests controlled by the provincial government. The two case studies therefore provide an opportunity to investigate property rights themes under different tenure arrangements.

Having decided on a case study approach and having selected the two case studies, the next stage was to decide on how to operationalise the research by deciding on what data was to be collated and which methodologies to use. This is described in the next section.

4.4 Operationalisation of the research

One of the first tasks was to identify as far as possible how closely matched data sources were likely to be in each of the case study locations, a critical step in producing valid and comparable data. In considering data sources, a key issue was access to materials. It was assessed that access to materials would be more difficult in the Solomon Islands, given the lack of a highly developed bureaucracy or culture of transparency at the government level, and so it was decided to use the Solomon Islands as the benchmark for data collection, with the British Columbia case being required to match the data that was available in the Solomon Islands. The second task was to decide

on how to collate data. It was decided that field work would form an integral part of the research design in order to give an opportunity to gather information about contemporary processes within the actual context of each location. A pilot study was undertaken, involving visits to both locations in 1995.

From September to mid November 1995 a pilot study was undertaken with visits to the Solomon Islands and British Columbia. The aims of this pilot study were to develop the overall research strategy in greater detail in the light of on-site experience and possible problems; to refine the research task; to identify the units of analysis most appropriate to the research questions; to identify sources of primary and secondary data for the thesis; and to start data collection. The helpfulness of pilot study work in an overall research design has been identified by a number of people (see, for example, Yin, 1994 and Oppenheim, 1992). The pilot study provides an opportunity to refine data collection plans (Yin, 1994) and to develop themes to be explored in semi-structured and/or depth interviews (Oppenheim, 1992). The pilot study also provides an opportunity to identify an appropriate sampling strategy and the unit(s) of analysis. It is useful for assessing the language to be used in questionnaires and interviews. It is also a useful tool for developing conceptualisation.

Other significant advantages of a pilot study are that exploratory interviews can help identify the variables to be measured and the scales to be used (Oppenheim, 1992) as well as identifying valid data for comparison. This was of particular importance for this thesis given that the case studies were in two different regions. In summary, the pilot study offered the opportunity to assess the relevance to the research questions of a comparative case study approach; the appropriateness of the two case studies; the identification of suitable data sources; and it enabled a more “on the ground”

assessment of whether matching data sources existed to provide sound comparative data.

These points proved to be of significance during the course of the pilot study. For example, ownership and “landowners” were found to be problematic terminology in that, although “landowner” was commonly used by Solomon Islanders to indicate their interest in a particular piece of land and/or forest, the term was a product of the introduction of the concept of “ownership” which, according to Solomon Islanders interviewed, was not an accurate reflection of customary tenure in that, traditionally, there were no “owners” of land. This point ties in with the discussion about conceptualisation of property rights and regimes as presented in Chapter Two. It highlights the significance of clarifying the distinction between western concepts of ownership and property rights systems operating in other cultural and social systems. Thus, in the light of this finding, the Solomon Islands case study refers to “land holders” unless citing the terminology used by an interviewee or other data source. The pilot study also confirmed that the forest management issue was indeed a highly politicised one in both locations with access to forest resources being contested both within the realm of policy development and on the ground. This helped with developing a case study protocol and refining the questions to be asked in each location. The pilot study also allowed for an assessment of data sources to be undertaken and the comparability of such data between the cases.

The importance of triangulation to this research was recognised early on as a means of neutralising bias. Triangulation in a case study allows for contextualisation and this is important given that part of the aim of the study is to investigate the relationships between social actors. Its importance became even more apparent, given the finding that

forestry was a highly politically charged and sensitive issue within the Solomon Islands and British Columbia, involving complex processes that influenced and were influenced by forest policy developments. As Bulmer and Warwick (1993:327) state: "In complex areas of policy or where public debate about the research findings is likely to occur, multiple rather than single methods should be used."

Given the sensitive nature of the topic of forestry in the Solomon Islands and British Columbia, the potential methodological dilemma was in how to produce research data that was not the product of politically charged viewpoints (Bulmer and Warwick, 1993) and which could produce methodologically valid data within the constraints of sensitive research. One of the aims of the pilot study was to ascertain the general level of awareness about forest use as a political issue. The case study protocol was developed after the pilot study, once the high levels of awareness of forest management issues in both locations became apparent. According to Yin (1994), the case study protocol is the blueprint for how to conduct the specific case study, incorporating the project objectives, the data collation procedures and the questions used to guide the overall case study research, including where appropriate for guiding qualitative interviews. The drawing up of a case study protocol enabled the research design to be refined and the data collection and analysis to be more focused (see appendix 1).

Within the case study approach, it was decided to use the following methods. Focused sampling was used to select respondents for qualitative interviews, in order to gain the opinions of key individuals. This complemented the focused sampling strategy used in selecting the case studies themselves, where focused sampling is:

“the selective study of particular persons, groups, or institutions, or of particular relationships, processes or interactions that are expected to offer especially

illuminating examples, or to provide especially good tests for propositions of a broad nature.” (Hakim, 1987:141-142).

Because the case studies evaluate forest policy, administrative records and documents were part of the reality being studied and therefore were a useful source of primary data. An analysis of administrative records (including archival records) also provided a sound basis for a historical review and international comparison. The initial research trip highlighted the significance of a historical approach to examining processes and relationships on three main counts: it offered one research method which could complement others; it provided a longitudinal dimension to the research rather than a simple snapshot approach; it illuminated some of the processes behind forest policy developments (Ludvig, Hillborn and Walters, 1993; Marchak, 1995). Data sources identified for this historical review included a review of the development of colonial legislation and land alienations in both areas, royal commissions to assess and recommend forest policy and administrative records.

The research methods employed aimed for triangulation of data, using a number of data sources, including official and other institutional documentation, historical references, newspapers, interviews with key informants and some non-participant observation. The aim was to ascertain who had the property rights to the resource and identify conflicting claims, identify the structures of communication and inter-relationships between state, local communities and economic interests and to put this in a historical context of property rights developments.

After the pilot study, further fieldwork was undertaken in each location at different times. In August/September 1996 a further research trip was undertaken to the Solomon Islands. The data gathering was an extension of what had been collated in the previous

year. The data gathered over the course of the two trips included documentation, trips to forest concessions, non-participant observation, group discussions and qualitative interviews with key informants (see appendix 2 for a list of key informants). Interviews were carried out with government representatives purposely selected because they dealt directly with sustainable forest policy development and the contribution of forestry to the economy of the country, NGO representatives and local forest community members. Observation of one particular businessman and two community members revealed how negotiations were undertaken in practice. Correspondence with and between relevant actors was analysed. Administrative documents were collated which were relevant to the focus of the study and the research questions. These included site assessments of company operations, company documents including those filed with the Registrar of Companies for the Solomon Islands and policy and legal documents.

A number of secondary sources were used. A review of the two Solomon Island newspapers was undertaken for 1995, noting all articles and letters related to forest issues. Other newspaper and magazine articles relevant to the issue were sourced as well as documentation from NGOs and commercial operations. Secondary materials were also collated at the Law Library of the University of the South Pacific. After the return from the field, extensive archival research was undertaken for the Solomon Islands using official documentation held in the archives at the British Library of Political and Economic Science and the University of London Law Library. In addition, correspondence was undertaken with key informants and other sources.

Further British Columbia research was undertaken in January and February 1999. The British Columbia fieldwork consisted of collecting both primary and secondary data in

Vancouver, the provincial capital of Victoria and the Nelson forest region. It was decided to focus on a particular region after the pilot study revealed the logistical difficulties presented by the distance and cost of travel within the province. The Nelson forest region was selected because it presented opportunities to study two separate community initiatives within relatively close proximity of each other and within the same Ministry of Forests administrative region. Key informants were interviewed in each of these locations, as well as in Vancouver and Victoria, and were selected because of their involvement in and knowledge of forest management and policy in the province and locally (see appendix 2). Key informants were government officials of the Ministry of Forests, provincial NGOs and local forest community representatives.

Archival materials were collated at the libraries of the University of British Columbia and the University of Victoria as well as being gathered from key informants. Official, private sector and civil society policy documents and other administrative records were important sources of primary data. Official documents and other interest groups' publications are extensively published on the worldwide web, and this provided a comprehensive method of collating additional administrative records. Secondary data included newspaper articles, NGO materials and the large body of literature on forest management in British Columbia. Additional archival and official documentation was collated at the British Library of Political and Economic Science.

4.5 Conclusion

In order to study the complex processes behind the evolution of forest management policies and property rights institutions, and to investigate the inter-relationships between social actors, it was decided that a case study approach would be the most

appropriate way to gather relevant data. Two case studies were selected in order to provide a more rigorous empirical basis for using the analytical framework developed in Chapter Two. A number of data sources were used to provide data triangulation and to improve the comparability of data between the two case study locations. The pilot work was significant in helping to refine the research task in the light of empirical evidence available, making the research task more practically achievable and helping to narrow the research focus. This in turn helped to refine the future research strategy for the further data collection phase. In total, both case study locations were visited twice between 1995 and 1999. Additional archival, official and other policy documentation and media reports were collated in the UK. The following two chapters present the case study findings and Chapter Seven provides a cross-case analysis, comparing findings and relating them to the analytical framework developed in Chapter Two.

Chapter Five

Solomon Islands Case Study

5.1 Introduction

This chapter presents empirical data on the property rights dimensions of forest management and control in the Solomon Islands. It is based on interviews with key informants, logging concession visits and non-participant observation conducted in 1995 and 1996 as well as an analysis of archival records from the 1950s and 1960s in order to address the three research questions identified in Chapter Three: How has the dominant forest management regime evolved? What are the property rights implications of the forest management regime for communities? How do local forest communities and the dominant forest management regime interact? The analytical framework elaborated in Chapter Two that identified four key factors influencing property rights choice and change was used to guide the analysis of the data, the four factors being distributional conflict, bargaining power, ideology and historical path dependence. All proved to be relevant in the context of forest management in the Solomon Islands and how it evolved, helping to explain some of the processes shaping and constraining the establishment and modification of property rights institutions over time.

Section 5.2 provides a contextual setting for understanding the Solomon Islands case study. After a brief description of forest resources in the Solomon Islands, the section describes the key characteristics of Solomon Islands society, notably the role of custom and customary land tenure. Section 5.3 then analyses the development of forest management since the colonial period, highlighting the role of the state in introducing a policy framework to facilitate commercial exploitation of timber and the response of Solomon Islanders to these developments. It then looks at forest management in the

1990s, and in particular the emergence of a powerful timber industry. Section 5.4 describes the nature of the interactions between Solomon Islanders and the timber industry in the 1990s, highlighting the political nature of processes surrounding access to and control of the forest resource, in particular the asymmetries in power between the actors and issues of distributional conflict.

5.2 Case study context

The Solomon Islands, situated in the south west Pacific, north and east of Australia, east of Papua New Guinea (see map 5.1), are a scattered double chain of islands, stretching in a south-easterly direction for 1,400 km. It is the third largest archipelago in the South Pacific, covering 1.28 million km² of sea, and with a total land area of 28,349 km², comprising 992 islands. There are 6 main islands (varying in length from 140 km to 200 km and in width from 30 to 5 km), 40 smaller but significant ones and the remainder being largely tiny coral atolls and cays. Part of the Pacific Ring of Fire, in the zone of convergence of the India-Australia and Pacific plates, the Solomon Islands are geographically young and dynamic, with a susceptibility to earthquakes. Cyclones are a frequent phenomenon and are the main cause of natural large-scale vegetation disturbance. Most of the country is mountainous and 80% covered by tropical rainforest, although the botanical composition of the forests varies across the islands, according to the geological zone and history of plant and animal dispersal in the region (AIDAB/MNR, 1995).

Map 5.1 Solomon Islands



The significance of Solomon Islands forests from a biodiversity perspective has been noted by scientists and environmental non-governmental organisations, and is particularly related to the levels of species endemism which exist, even between the islands of the Solomons. The country is renowned for a high degree of bird endemism. Lees (1990) reported that 72 of the 163 species of land birds that breed in the Solomon Islands are endemic. A survey in 1995 found three rare species of flying fox (which is dependent on undisturbed natural forest for habitat), including the monkey-faced flying fox (*Pteralopex anceps*), which is only found on Choiseul (Solomon Islands) and Bougainville (Papua New Guinea) (Solomon Star, 1996a). Dr Jared Diamond stated that "there is no other place in the world...where biological phenomena of speciation and

population variation among islands are so obvious" (Diamond, 1976 cited in Lees, 1990:47). A number of ecological surveys have recommended the designation of protected areas, but of the 26,687 km² of total forest area in the Solomon Islands, the amount protected in reserves is virtually non-existent. According to Lees (1990), protected areas cover 0.2% of the land area, including one turtle and six bird sanctuaries, none of which are managed or effectively protected, one national park to the south of the capital, Honiara, which is now degraded logged over forest and an ecological reserve on Kolombangara, Western Province, which has since been selectively logged. All these reserves were established in the colonial period up to 1978 and are regarded as being too small to be significant in protecting representative forest areas, even if they were effectively protected. No protected areas have been successfully established since, although the Maruia Society, under contract to the Australian National Parks and Wildlife Service, undertook a survey in 1990 to identify a potential protected forest system for the Solomon Islands (Lees, 1990).

The Solomon Islands marine and reef eco-systems are also recognised as of global significance from a biodiversity perspective, with the Marovo Lagoon being the world's best defined double barrier island enclosed lagoon, and one of the world's largest lagoons; as a result, it has been proposed for World Heritage Site status. The Solomon Islands are also valued because they present rare undisturbed eco-system transitions from the sea to mountain tops, including mangrove, lowland and montane forest. The maintenance of healthy reefs is dependent on undisturbed forest to prevent siltation and is demonstrative of the link between forest and sea environments that is prevalent in the Solomon Islands.

Although there is very little formally protected forest in the Solomon Islands, in fact a large-scale threat to the country's forests only emerged since the 1980s, with the increasing presence of industrial-scale logging activities. The lack of formally protected areas is mainly a result of the tenure system in the Solomon Islands, with 87% of the land being under customary tenure of local clans. A spokesman for the Marovo inhabitants stated in 1990 that, although they wanted to protect their land and sea from the destructive practices of logging, fishing and mining companies: "We can't have anything like what they call a national park here in Marovo... White men who talk about "conserving the natural beauty of Marovo" have the wrong idea. They don't care too much about people, but we want to see people as part of what we look after" (cited in Hviding, 1996: 56).

Prior to the arrival of colonial forces at the end of the 19th century, which established the British Solomon Islands Protectorate in 1893, there was no unifying vision amongst this group of islands, although there were cultural, geographical and physical similarities between all Melanesian peoples in the region (Ipo, 1989; Bennett, 1987). Land was the basis of cultural identity, with people having an immensely strong attachment to land, which continues to this day (Hviding, 1996; Burt, 1994; Larmour, 1979). Although no written records exist of societies in the Solomon Islands¹⁶ prior to contact with the European world, descriptions by the initial wave of outside visitors and

¹⁶ The Solomon Islands as an identity only emerged with the imposition of a British colonial administration but the term is used here to refer to the group of islands which became the Solomon Islands at independence from Britain in 1978 and which prior to that were part of the British Solomon Islands Protectorate.

the oral histories of Solomon Islanders themselves all describe strongly communal units based on kinship living in small, dispersed village areas¹⁷. A common theme amongst most authors is the significance of land and the environment to Solomon Islanders, and in particular the customary tenure and management of natural resources as a primary function and responsibility of clans. Communities lived (and largely still do live) in close proximity to the forest resource, using physical and cultural features in the landscape such as ridges, streams, nut groves and ancestral shrines to identify clan boundaries (Ipo, 1989). They planted gardens within the forest for food, hunted and collected fruit and nuts from the forest, used forest plants for medicine and trees for constructing houses and canoes. According to Clarke and Thaman (1993), the sustainability of traditional agroforestry systems has been established through archaeological work, with production being maintained over millennia and the environment being protected if not enhanced. Thus, Solomon Islanders' lives were intimately bound to the surrounding environment.

According to the literature, power distribution, whilst not strictly equitable, did not generally favour individual gain at the collective expense. Bennett (1987) describes slaves and women as having inferior roles to men of the clan, so it seems that the power structures favoured the maintenance of customary ways rather than being equitable in absolute terms. Chiefs earned their position partly through inheritance but also partly by

¹⁷ There are a number of ethnographic accounts of Solomon Islanders by missionaries and more latterly by academics, as well as other historical records such as accounts by former civil servants, which describe Solomon Islands societies. See, for example, Ivens (1927); MacQuarrie (1945); Bennett (1987); Allan (1990); Keesing (1992); Burt (1994); Hviding (1996). Whilst these need to be read in the context of the authors and the period in which they wrote, together they present a clear picture of the subsistence livelihoods and communal societies which made up the Solomon Islands prior to European contact and which continue in varying degrees to this day. In addition, there is a small amount of published material written by Solomon Islanders which records customary laws and tenure, both past and present. See in particular chapters in Crocombe and Tuza (1992) ; chapters in Laracy ed, (1989); Fifi'i, (1989); chapters in Larmour ed, (1979).

their actions in proving they were "Big Men", based on providing for the clan at communal feasts and in leading relations within and between clans, including warring with other clans¹⁸. Whilst clans may have recognised chiefs, these chiefs did not have the automatic right to make decisions on behalf of communities but rather were seen as wise guardians of custom and genealogies and any decisions were traditionally arrived at by consensus of the community (Fifi'i, 1989; Fingleton, 1989). The literature describes the traditionally fluid nature of chiefdom and its association with trusteeship rather than authority, the latter being a convenience of the colonial administration (Hviding, 1996; Fingleton, 1989; Bennett, 1987). Hviding (1996) describes leaders as being the guardians of the Marovo Lagoon, in terms of knowing genealogies and the environment. The status of chief became enhanced during the colonial period, as this facilitated the imposition of colonial rule through dealing with a single identifiable representative (Fifi'i, 1989; Fingleton, 1989). Bennett (1987) describes the colonial appointment of headmen to facilitate the imposition of government in the villages, and that these were not necessarily the same as the traditional chiefs in some parts of the Solomon Islands, leading to tensions within communities. Colonial policies and missionary activity weakened the power of traditional leaders and many lost it completely, and often the fluidity associated with changing big men was replaced with more permanent positions of power (Bennett, 1987). Fifi'I (1989) and Keesing (1992), describe the Kwaio societies of Malaita as traditionally not having chiefs as such, but that these were established in response to political pressures associated with colonialism and anti-colonial movements.

¹⁸ See Bennett (1987:14-16) for a description of the role of chiefs.

Social cohesion, one of the attributes that contribute to robust common property regimes as identified by Ostrom (1990) and others, was strong within communities. The details of social organisation varied, for example between islands and between "bush" and "saltwater" peoples¹⁹ but there appear to be universal features throughout Solomon Islands culture and society such as communal land and resource tenure, the cultural significance of genealogies, the worship of spirits, the development of gardens for food and the performance of certain tasks and ceremonies at the clan level. Crocombe and Tuza (1992), Fifi'i (1989) and Laracy et al (1989), reveal the pivotal importance of Solomon Islanders' relationships with their land and resources and in particular the role of custom with regard to social organisation and land tenure. There are 87 identified languages in the Solomon Islands, so a shared local language provided a bond between local clans and villages, but the primary bond was kinship. A clan comprises a number of families which claimed descent from the first settler of the land (Ipo, 1989). Land transfers occurred between generations according to his or her descent from a clan. Melanesian land tenure systems exhibit great complexity in the different levels of use rights accorded to various members of the clan that have no direct comparison within western concepts of ownership (Hviding, 1996; Kaitilla, 1995; Burt, 1994). Burt (1994) and Hviding (1996) describe the multiplex series of relationships and use rights based on "cognatic" or "ambilinal" inheritance through both male and female descent lines. Everyone within the clan had varying rights to the territory and responsibilities to each other. Interdependent relationships existed not only within communities but also between the communities and their territory: "the mutualism between defined units of

¹⁹ "Bush" dwellers are those living inland who do not tend to use the resources of the marine environment, depending primarily on land-based resources for food. "Saltwater" people are the coastal dwellers who fish. The communities would generally exchange surpluses but there remained a mistrust between them (Hviding, 1996).

people and their environment is seen to be constitutive of the continued lives of both” (Hviding, 1996: 132).

Scholars analysing contemporary social relations in the Solomons as well their history, such as Hviding (1996), Burt (1994), Keesing (1992) and Bennett (1987), give detailed descriptions of how custom has evolved since the colonial period, with clans adapting traditional practices to changing circumstances around them, demonstrating the inherent flexibility of the institutional arrangements²⁰. Custom as social organisation and mediator of the relationship between communities and the environment was still the predominant force in rural life at the time of field visits in 1995 and 1996. 85% of the population of around 400,000 lived a largely subsistence lifestyle in rural villages (Gegeo, 1998) and 87% of the land remained under the customary tenure of local clans. The day-to-day social interactions afforded by the subsistence or local cash economy were the most significant relationships in terms of rural Solomon islanders’ everyday lives. This still involved dependence on forests and the sea for food, building materials and medicines. The ecological significance of the forest was also important for every day livelihoods: potable water; shellfish and fish breeding areas are all dependent on healthy forest ecosystems. Despite the fact that more and more Solomon Islanders made journeys between islands and had visited towns and the capital, Honiara, the clan remained the primary social institution for giving Solomon Islanders their identity and clan ties

²⁰ Hviding's (1996) detailed account of the clans in the Marovo Lagoon and the customary management institutions which have evolved for their marine environment describes the complex series of relationships between people and place. This work has been particularly helpful in adding depth to my understanding of issues in the Marovo Lagoon, as described later in the chapter. Keesing's (1992) descriptions of the Kwaio culture are founded on the concept of the Kwaio as seeking to preserve their culture in the face of increasing westernisation and christian evangelism, and as such uses the language of resistance and confrontation to describe their actions. Bennett's (1987) monograph is a definitive history of the Solomon Islands, and, as with Hviding's monograph, has been a significant reference for my work on the Solomon Islands. Thematically, it looks at Solomon Islanders' relationships with their environment, each other and the outsider world, in terms of continuity and change.

remained strong even when members may have moved away to work in the cash economy: “We only survive as a country because of the fact that we have access to land for food production and not commodity production” (Paroi, 1996).

However, the literature describes how the colonial period did undermine traditional relationships between clans and their environment, and this had relevance for the development of forest management policies. For example, colonial anthropologists introduced the concept of land being inherited through a single descent line (either “matrilineally” or “patrilineally”) and this gained common acceptance as the appropriate model within the British Solomon Islands Protectorate. Burt (1994) argues that this view was based on anthropological models first researched in Africa and adopted by the colonial service in the Pacific, in large part to conform with ideological beliefs regarding economic development: “It is no coincidence that unilineal inheritance is easier to reconcile with western notions of property, which have proved more appropriate to capitalist rural development projects” (Burt, 1994: 318). In addition to applying inappropriate inheritance models, attempts were also made to expropriate lands. A series of “Waste Land” regulations were introduced between 1900 and 1904 that alienated lands classified by the colonial administration as unoccupied, unused and unowned in order to establish large-scale commercial copra plantations (Bennett, 1987). Customary tenure and the colonial processes to adapt and undermine it have influenced the development of forest policy, as outlined in the rest of this chapter.

5.3 The evolution of forest management in the Solomon Islands

This section looks at the evolution of forest management in the Solomon Islands, focusing on the property rights assumptions of the dominant management approach and

its implications for Solomon Islanders. As noted in Chapter Three, there are prevailing ideological foundations to the dominant forest management regime based on assumptions regarding the most appropriate property rights structures for development of the forest resource. The evolution of forest management in the Solomon Islands can be understood in terms of the influence of these foundations in relation to customary tenure and the bargaining parties involved. Section 5.3.1 studies the development of the timber industry in the Solomon Islands and its origins in the colonial period, when the British attempted to introduce a forest management model that had been established in other colonies such as Burma and India. This model was based on expropriation of forest resources by the state for timber production and protection of environmental services, with the underlying principles being that the native population did not have the technical skills to develop a commercial forestry sector and that customary tenure was not appropriate for commercial timber exploitation. The section explores how attempts to establish a Permanent Forest Estate were largely unsuccessful in the Solomon Islands, allowing for direct bargaining between the industry and landholders. Section 5.3.2 explores forest management in the 1990s, and in particular the structure of the timber industry and its relations to the state. In the 1990s, the power of the timber industry grew, as the number of timber companies and the levels of timber production grew. The section describes how the timber industry was able to operate virtually unchecked due to the weak nature of the state, establishing itself as a powerful actor in terms of management and control of the country's forest resources.²¹

²¹ Bennett (2000) presents a comprehensive history of the forestry sector from 1800 to 1987, published after this case study was researched. It provides detailed insights and analysis that support the findings of this case study and is an insightful companion reference alongside her 1997 book.

5.3.1 Developments up to independence

Since the inception of a Forestry Department in 1952 under the colonial administration, state forest policy had as its primary goal the development of the forest resource for large-scale timber production. The Forestry Department was established in 1952 as part of the post-war identification of natural resources in the Solomon Islands to be exploited to provide economic development and to ensure that the colony “paid its way”, rather than the situation to date where the colony had been heavily underwritten by Britain. The post-war period saw the returning British administrators determined to increase the productivity and achieve profitability of the Solomon Islands by broadening the agricultural and resource base, such as forestry, mines and fisheries. Alongside the identification of timber as a resource to be exploited commercially came the prevalent property rights approach to such development, namely central colonial control of a Permanent Forest Estate. The need to establish a Permanent Forest Estate was identified by F. S. Walker in his inventory of Solomon Islands forests in 1948:

“to control the utilisation of forest resources on the broadest grounds for the future welfare of the Protectorate, by protection of water supplies, prevention of erosion, and exploitation of timber and other forest produce in such a manner that the productivity of the land is not impaired but improved...**To achieve these objectives, Government must assume a large increase in power**” (Walker, 1948:59-60, cited in Bennett, 1995, emphasis added).

Although broad conservation objectives had been identified alongside timber production, by the time a Forestry Department was up and running in the mid 1950s, the emphasis was firmly on commercial timber exploitation as the main goal of forest management and tenure:

“Forest policy...continues to stress the priority of securing an adequate forest estate for the territory. In the prevailing economic conditions, it is accepted that emphasis must be directed to areas that can be put to early productive use” (BSIP FD, 1957: p.1).

Whilst the Forestry Department had few resources during the 1950s, this was a period when forestry policy and the first requisite regulations were drafted that would enable a push for growth of the timber industry in the 1960s. During 1957, samples of hardwood species potentially suitable for trade were sent to timber merchants in Australia, Hong Kong, Japan and Karachi, with the intention of establishing overseas commercial interests in exploiting timber in the Solomon Islands (BSIP FD, 1957).

Given that customary tenure of land and forests was the predominant form of tenure in the Solomon Islands, the objective of establishing commercial timber production on a Permanent Forest Estate inevitably meant that the Forestry Department required large-scale alienation of forest lands from customary landholders in order to establish a Permanent Forest Estate of a sufficient size to allow commercial exploitation. Thus, the development of forestry policy was intimately bound to developments in land policy; regulations for the former could not be passed until land regulations had been passed. This was the dilemma in 1957: whilst forestry legislation had been drafted with the main objects of "providing for creation, protection and management of forest reserves and controlling the working of forests on "private" lands", the department had to wait for the completion of the review of land policy and legislation. "Until such legislation has been passed, the activities of the department are of course most severely restricted and the contribution it should make to the development of the territory correspondingly delayed" (BSIP FD 1957:1).

Customary tenure was generally held to be an impediment to development by the colonial administration. Colin H Allan was charged with leading a special land commission "to recommend in what way the use and ownership of...land to which no validated claim is

found to exist, can best be controlled” (cited in Allan, 1990:171) and produced his report on customary land tenure in 1957. However, in his memoirs of his time in the Solomon Islands, Allan recalled the predominant “African” viewpoint of many of the District Commissioners in the Solomon Islands who just wanted to see land policy implemented, with little interest in the complexities of customary tenure as identified by Allan in his report (Allan, 1990). He recalled the director of forestry, Keith Trenaman, as being “grimly determined that land in which no interests could be found should be dedicated as forest estate and managed in perpetuity in the interests of correct forestry management as seen at the time” to the detriment, Allan believed, of other more important matters (Allan, 1990: 186-187).

The significant features of land and forestry regulations for the Forestry Department were as follows: the land regulations provided for "vacant" lands to be adjudicated and used as "public" lands with title vested in a Trust Board. Forest regulations provided for the legal dedication of land to forest use as "forest reserves" and for their proper management, and for the constitution of other valuable forest tracts as "forest areas". Thus, the land regulations were to identify and obtain vacant land which could be used in the public interest and the forest regulations made provisions that such vacant lands could be used as part of the Permanent Forest Estate.

The Land and Titles Ordinance [CAP. 56] 1960 allowed for the establishment of a Solomon Islands Land Trust Board, with the chairman of the board being the High Commissioner and including 11 Solomon Islanders (Larmour, 1979). It was the duty of the board to bring vacant land under public control to "further the use of land in the Protectorate for the benefit of the people thereof" (CAP. 56:13(1)). The Board had the

power to "purchase, take, hold and dispose of land, interests in land, and other property for the purposes of this Ordinance" (CAP. 56:13(2)). Vacant land was defined as being any land which was neither native customary land nor public land nor registered land. Native Customary Land was defined also by the Ordinance, having the following characteristics: land which was not registered and which was owned by a Solomon Islander or group of Solomon Islanders. This land had to have been cultivated or occupied by the owner(s) some time in the 25 years prior to 1st January 1958, or the owners should have received payments during those 25 years for permitting someone else (including the government) for occupying, cultivating or exercising any rights over the land, or if the owners had been identified in court proceedings.

Although the colonial intention towards the forest resource was clear in the 1950s and 1960s in attempting to gazette a Permanent Forest Estate, they largely failed to establish the concept of public interest in land (Larmour, 1979; Bennett, 1995). Indeed, despite the land and forestry regulations introduced in 1959 and 1960 respectively, the area of government-controlled land available for forestry did not grow beyond that which had been obtained during the initial wave of land alienations prior to 1914 (Larmour, 1979). This failure was due to resistance by Solomon Islanders, who since the imposition of colonial rule in the late 19th century had firmly opposed the colonial administration taking over customary lands²². In the early 1960s, the Land Trust Board established by the Land and Titles Ordinance failed to find any "vacant" land which could be used as forest reserves and the Board was wound up in 1964: "Invited to implement a policy they had no say in making, they politely refused to collaborate" (Larmour, 1979: 111). Thus, Solomon

²² See Bennett (1987) for a detailed history of colonial attempts to acquire land rights for various development proposals and the Solomon Islanders' responses. Also, Larmour (1979) summarises the significant land developments in relation to forestry and the orderly indigenous resistance to these moves.

Islanders found ways to resist the imposition of colonial land and forest management practices that went against their interests.

The 1960s saw the slow start of inclusion of Solomon Islanders in the administration and decision-making institutions of the colony, as part of the British plan to withdraw its direct rule. This proved to be a decisive period in thwarting once and for all the attempts by the colonial administration to establish an expanded Permanent Forest Estate. Debates in the Legislative Council throughout the 1960s and culminating in the heated debate surrounding the 1968 forestry White Paper and subsequent legislation demonstrate clearly the wide gap between the intentions of the colonial Forestry Department and the aspirations of Solomon Islanders and their representatives regarding control of the forest resource.

By as early as 1963 doubts as to the benefit of the type of development being initiated were already being raised (BSIP LC, 1963, p66-85) and conflict was emerging, with the establishment of two timber businesses that year by overseas companies, one Japanese (the British Solomons Forestry Company by Nanpo Ringyo Kaisha on the major part of Baga island) and one British (Levers Pacific Timbers on Gizo island), with other companies exploring forest resources elsewhere. There was strong concern expressed by unofficial members of the legislative council that the large scale development being welcomed to the protectorate, including overseas timber interests, was in fact not in the best interests of Solomon Islanders and amounted to exploitation rather than development. They urged that Solomon Islanders be given opportunities for developing the resources themselves rather than being given to outside companies where profits would go abroad and the natural

resources may be stripped. The argument was articulated expressly in terms of property rights to land and forest resources:

“Be careful, sir, that some of this development does not in the end amount to exploitation by taking away the very assets and the only assets that the people of these islands have and that belong to the people of these islands. Don’t let the excitement of seeing additions to the revenue cloud the big issue of the natural resources of the Solomons which belong to the Solomon Islanders” (BSIP LC 1963, p66-67).

Concern was also expressed at the loss of food sources which were currently available to be harvested by local people which would be reduced or lost due to commercial exploitation by outside interests, the net gains in business terms not being comparable to the loss in food sources. One unofficial member of the Legislative Council queried whether the actual returns would be anything like those being anticipated by the administration, with locally established companies being:

“just a tool or a subsidiary, subjected to the directives of a central Combine who will control the marketing and production of everything concerned with it. I see great danger in this form of development and I think we could easily be deceived and misled into inviting capital at a cost too great to ourselves” (BSIP LC 1963, p73).

The official response to Solomon Islander concerns expressed in the Legislative Council about the impacts of forestry and associated land legislation on the resources and people, including the potential problems of encouraging foreign investment in the forestry sector, was uncompromising in its assertion that Solomon Islanders could not undertake such a task:

“The development of certain Natural Resources is, as I am sure everyone appreciates, extremely technical and complicated. **It is nonsense to believe that small men here can take them on or are competent to do so.** They are not. Timber extraction is one which if it is to succeed has got to be done by outside interests.” (Financial secretary, in BSIP LC 1963, p81, emphasis added).

Despite the failure to find “vacant” lands and despite the Solomon Islander opposition to forestry objectives established by the colonial administration in the 1960s, the director of

forestry (known as the 'Conservator'), K.W. Trenaman, was unchanged in his approach to forestry and his belief that there were large tracts of unproductive and vacant lands waiting to be pressed into use for national interests. He presented for debate the White Paper on forestry to the Legislative Council in November 1968. Objectives remained fundamentally unchanged, in that the priority was on developing production forestry in the protectorate, in the short term logging forest areas and in the longer term aiming to replant with faster growing and more valuable species. In order to achieve these objectives, the Conservator stressed that the main forest areas should be dealt with as a national asset, i.e. under the control of the state - "This, I would submit, needs to be the root of all our thinking and decision on forest policy" (K W Trenaman in BSIP LC, 1968:33). Two of the methods to achieve these objectives were the creation of a production forest estate on publicly held land and the encouragement by private enterprise or international loan funds in reforestation work, the latter depending on control of the forest resource by the state for its success. In order to allay fears, he stressed that land would only be bought with the permission of the owners, removing the power of compulsory acquisition, and that they would be very careful to ensure that ample land was left for local peoples' own use: "the long term object is to bring into production for the good of the whole country land which otherwise, in the foreseeable future, would remain idle and unproductive" (BSIP LC, 1968:33).

In response to the conservator, Solomon Islander members of the Legislative Council and clergy expressed profound concern, particularly in regard to Forest Areas and the property rights implications of the policy. The debate between the official and unofficial members of the Legislative Council epitomised the differences in approach to property rights and the failure of the colonial administration to grasp the significance of customary tenure to

Solomon Islanders. It also highlighted the distinction between customary tenure and *de facto* control of the forest resource for timber extraction, a distinction which the Solomon Islander members were very aware of: "Trees to the Solomon Islanders, as many of the members on this side of the House [the unofficial members] will agree with me, are like a property, or are a property...so it is wrong to destroy forest areas or property which to Solomon Islanders is their property and they feel they have the sole right to that property and even the pigs and things in the bush in those areas" (BSIP LC, 1968:36). Members raised the fact that people on the ground were not kept informed of developments and had a mistrust of a forestry policy which they felt would take away their land and access to resources they depended upon. Despite the fact that the declaration of a Forest Area did not affect ownership in legal terms, in practice it diminished control by landowners as they could be declared without their consent and traditional activities were limited unless licences were obtained from the Conservator of Forests or his appointees. They also tied up effective control (even though not "ownership") of forest resources for a long term without necessarily being developed for forestry at all. It was urged therefore that Forest Areas should only be designated with the agreement of the landowners, a point which the Conservator of Forests did not agree with: "...we must accept that in the last resort the Government must do what it thinks necessary to control this asset" (BSIP LC, 1968:43-44).

The outcome of the intense debates was that the Conservator of Forests made substantive changes to the Draft White Paper, whereby all Forest Areas would be cancelled and a system of timber licensing for commercial exploitation would take their place. This was presented as not altering the ownership of the land and not involving control of the landholders' use of the land and resources for their own use. Subsequently, the Forests and

Timber Bill was drawn up on the basis of the amended White Paper. This Bill produced a certain amount of debate in the Legislative Council based around similar concerns: Solomon Islander rights to control the resources on their land, to use forest areas for hunting, gardening and other uses which might be designated as Controlled or State Forests, the right to appeal against the granting or non-granting of timber licences, and the control of the forestry industry by overseas interests (BSIP LC, 1969). Nevertheless, the Forest Resources and Timber Utilisation Ordinance was passed in 1969 and remained the basis of forestry law in the 1990s, with a series of amendments having been passed in the meantime. The most significant change was the extension of the licensing system to customary land in 1977 as a means of extending the area of forests which could be commercially exploited.

In conclusion, the 1950s and 1960s were a fundamentally important period for establishing both future forest policy and the seeds of discontent regarding that policy. There were three important strands which continued to resonate in the 1990s: 1) the colonial administration actively sought to establish a commercial timber industry in the Solomon Islands based on soliciting foreign companies to develop the resource, rather than encouraging an indigenous-based industry, which was criticised as being exploitation rather than development; 2) in order to achieve this vision of a commercial forestry sector, the colonial administration actively sought to increase the area of forested land under their direct control, despite opposition from Solomon Islanders who successfully resisted further large-scale land alienations; 3) Solomon Islanders believed this vision of commercial timber production was incompatible with their traditional uses of forests and that, regardless of legal tenure, they would lose control of forest resources if the policy was pursued.

Nevertheless, despite the reservations expressed by representatives in the 1950s and 1960s of the likely benefits of a commercial timber industry developed by non-Solomon Island businesses, by the 1990s large areas of the country's forests were indeed under timber exploitation plans, largely controlled by overseas interests.

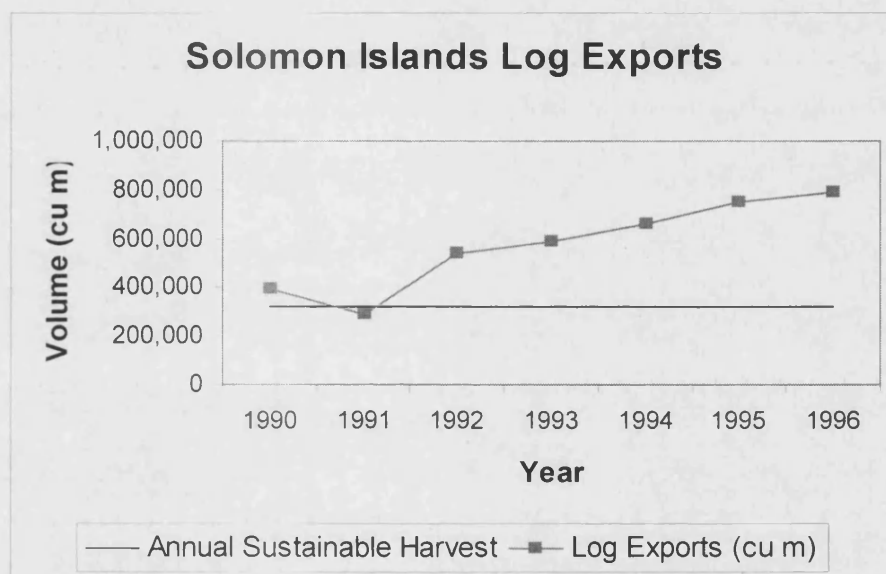
5.3.2 Forest management in the 1990s

This section examines forest management in the Solomon Islands in the 1990s. The increasing power and influence of the timber industry in terms of the management and control of the forest resource in the 1990s is reflected in the increase in the number of companies and the extent of their operations, as well as the relative impunity with which they were able to operate. An analysis of the structure of the timber sector and its operating environment is useful for understanding how private corporate interests became increasingly influential in terms of forest control and management at an operational level and were, in the main, able to function with minimal effective controls on their activities both in the forest and in terms of economic returns to the country. The ownership structure of the timber industry, and in particular the extent of foreign control of Solomon Islands-registered timber companies, is relevant for two principal reasons: it facilitated legal and illegal transfer pricing activities, whereby the majority of profits made by the industry accrued overseas; and it added to the sense of distance from, and therefore lack of accountability by, companies managing the forest resource for timber extraction, both to landholders and to the state, as described below and in section 5.4.

Up to the early 1980s, most logging took place on government-owned land or customary land leased by the government. After that, most commercial logging took place on customary land as government-owned land became depleted (Fraser, 1997; Bennett, 1995).

Although the colonial Forestry Department actively sought to develop the timber industry in the 1960s, it was not until the end of the 1980s that the industry started to expand, with the number of operations granted licenses to log and the volume of timber cut increasing markedly. Logging accelerated rapidly in the 1990s to as much as three times the government's annual sustainable harvest rate of 325,000 cubic metres, see figure 5.1.

Figure 5.1: Log exports from Solomon Islands 1990-1996



Source: Central Bank of Solomon Islands, 1992 and 1995; AIDAB/MNR, 1995; interviews 1996

In the 1990s, the Solomon Islands was a significant exporter of tropical hardwood logs, with most of the country's timber industry involved in the export of round logs to the South East Asian markets of Japan, South Korea and Taiwan (FAO, 1999). The industry was the primary contributor to GNP and regularly contributed over 50% of export earnings through fiscal measures at the national level (see Central Bank of Solomon Islands, 1992 and 1995). The Solomon Islands national economy was therefore heavily reliant on the industry, although the lack of effective control over the industry meant that most of the profits from logging were not captured by the central government.

When initially established, the timber industry was largely dominated by Australian, British and Japanese logging interests but these companies changed hands over the years plus the number of companies operating increased. Despite an increase in Solomon Island-registered logging companies in the 1990s (Fraser 1997), many of these ostensibly Solomon Islander-controlled licences were in turn owned by, or the operations were run by, foreign logging companies and individuals. An analysis of records held by the Solomon Islands Companies Registrar carried out during the first field trip in 1995 confirmed the widespread opinion amongst all key informants that the industry was dominated by Malaysian and Korean interests, with some being held by offshore companies (see figure 5.2). However, changes in ownership of licences and companies occurred frequently during the 1990s and as a result customary landholders, and responsible officials, were often unaware of who was operating the logging licence. For example, in September 1995, a visit was made by the author and a colleague in the company of a Solomon Islands Development Trust representative to a logging concession approximately 15 miles west of Honiara on the Tamea road. Neither of the Forestry Department officials interviewed after the visit knew who owned the operation, although they knew about it, claiming that it “just appeared one day”. In addition, company records were not always up-to-date. For example, in 1993 the Malaysian company Kumpulan Emas Berhad bought four logging subsidiaries in the Solomon Islands making it the second largest owner of logging licences in the country (Mellor, 1995b). However, the Solomon Islands Companies Registrar still showed the previous owners on its company records in 1995. In fact, these particular Solomon Island subsidiaries changed hands four times between 1990 and 1993 (Forests Monitor, 1996).

Figure 5.2: Solomon Island registered companies with majority ownership and directorships by foreign nationals

Name of company	Current Directors (at date of last entry)	Current Shareholders (at date of last entry)	Date of last entry
Allardyce Lumber Company Limited	D G Minchin (British); Taiswis Enterprises Ltd (Hong Kong co.); Frampton Investments Ltd (Hong Kong co.); J Dixon (Australian) - alternate director for Frampton Investments Ltd.	Taiswis Enterprises Ltd (Hong Kong co.): Ordinary 8,944 Preference 107,334 Scripts Ltd (Hong Kong co.): Ordinary 3,062 Preference 36,738	1990
Dalsol Ltd	Hu Zhuo Lin (Chinese) Hong Zhi Ming (Chinese) Mo Wulin (Chinese) Xiao Haojie (Chinese) Dong Ming Xun (Chinese)	Zhong Xing Investment (SI) Ltd (SI registered company): Ordinary 278,914	1994
Eagon Resources Development	Youngjoo Park (Korean) Kyesoo Juhn (Korean) Hoyoung Lee (Korean)	Youngjoo Park: Ordinary 1 Kyesoo Juhn: Ordinary 1 Eagon Industries Co Ltd: Ordinary 1,999,998	1994
Earthmovers Solomons Limited	Tiang Ming Sing (Malaysian) Teo Keng Seng (Malaysian) Hai Ai Ing (Malaysian)	Tiang Ming Sing: 19,999,999 Hai Ai Ing (in trust for Tiang Ming Sing): 1	1994

Eastern Development Enterprises	Teo Keng Seng (Malaysian) Walter Jones (Solomon Islander) Tiang Ming Sing (Malaysian) Hai Ai Ing (Malaysian)	Tiang Ming Sing: 180,000 Walter Jones: 120,000	1993
Golden Springs International (SI) Ltd	Kang Wibisono (Indonesian) Jenny Wibisono (Indonesian) Soelistioyati Wibisono (Indonesian) Yu Li (Chinese) Netta Liu (American) Wong Kin Chun (Hong Kong)	Kang Wibisono: ordinary 400,000 Jenny Soelistioyati Wibisono: ordinary 50,000 Soelistioyati Wibisono: ordinary 49,998 Wong Kin Chun: ordinary 1 Yu Li: ordinary 1	1993
Goodwill Industries Ltd	Ging Hii Yii (Malaysian) C K Tie (Malaysian) Dr Philip L K Ling (Malaysian)	Goodwill Resources Ltd (British Virgin Islands): ordinary 1 Hii Yii Ging: ordinary 1	1994
Integrated Forest Industries (SI) Ltd	Lai Kim Teng (Malaysian) Ong Chin Guan (Malaysian) Teo Siak Kui (Malaysian)	Axiom Forest Products Ltd (British Virgin Islands): Ordinary 999,999 Axiom Forest Resources Ltd (Hong Kong - in trust for above co): Ordinary 1	1992
Isabel Timber Company	Lai Kim Teng (Malaysian) Harry N G Kim Fan (Malaysian) Ong Chin Guan (Malaysian) Maraia Wainibu Oakei (Solomon Islander)	Axiom Forest Products Ltd (British Virgin Islands): 100%	1992

Kalena Timber Company	Tiang Ming Sing (Malaysian) Hai Ai Ing (Malaysian)	Earthmovers Solomons Limited: 39,999 Tiang Ming Sing: 1	Directors: 1993 Shareholders: 1990
Mavingbros Timber Company	Robert Belo (Solomon Islander) John Hii Kiong Mee (Malaysian) Ling Chung Kok (Malaysian) Richard Lee Koh Leng (Malaysian) Anthony Mark Honey (Australian)	Nila Wood Industries Sdn Bhd (Malaysia): 599 Hii Kiong Mee (in trust for Nila Wood Industries Sdn Bhd): 1	Directors: July 1994 Shareholders: May 1994
Mega Corporation	Hii Yii Ging (Malaysian) Jimmy Luhur (Indonesian) Susiwati Luhur (Indonesian) Tie Ching Kiong (Malaysian)	Mega Investment pte ltd (Singapore): ordinary 600,000	Directors: June 1993 Shareholders: March 1994
Silvania Products		Axiom Forest Products Ltd (British Virgin Islands): 100%	1991
Star Harbour Timber Company	Derek Chin Chee Seng (Malaysian) Tan Chee Yion (Malaysian) Yeong Chee Thong (Malaysian)		1994
Waibona Sawmill and Logging Company	Kang Wibisono (Indonesian) R K C Wong (Hong Kong) Jenny Soelistiowati Wibisono (Indonesian) Soelistiowati Wibisono (Indonesian)	Dorio Development Company Ltd (Solomon Islands): 4,000 Tashio Hashimoto (Japanese): 16,000	Directors: September 1992 Shareholders: February 1992

source: information taken from company files held by Registrar of Companies in October 1995.

Other links were known to exist between Solomon Island-registered companies and overseas companies and individuals, although often such data are difficult to collate. Somma Limited, a company owned by the then Prime Minister Solomon Mamaloni, had links with Ging Hii Yii, director and shareholder in Goodwill Industries Ltd. Ging Hii Yii was one of the company secretaries of Somma Ltd. in 1993. Tiang Ming Sing, who was the majority shareholder of Earthmovers, Kalena Timber Company and Eastern Development Enterprises, also owned Lee Ling Timber Sdn Bhd, a Sarawak-based timber company (Mellor, 1995a).

Whilst an analysis of the information presented above indicates a strong presence of foreign control of Solomon Island timber companies, if one considers the extent of the licences held by such companies the trend of overseas control becomes even more marked. The two largest licence holders in the Solomon Islands at the time of field work were Kumpulan Emas and Earthmovers (Mellor, 1995a and 1995b). Kumpulan Emas had logging rights to 468,494 hectares across its four Solomons subsidiaries, which was reported to be 40% of all concessions in the Solomons (Standard Chartered Securities, 1993), and Earthmovers Solomons Ltd was reported to be the largest logger in the Solomons (Mellor, 1995a).

The extent to which the timber industry controlled the forests of the Solomon Islands in the 1990s is clear from the quantitative and qualitative data collated during field trips. According to a Forestry Department official interviewed in October 1995, by that time logging licences had been issued for 4 million cubic metres of timber per annum and there were eight major companies operating, all of whom were foreign-controlled. Whilst the 4 million cubic metres included forests that were inaccessible at the time,

accessibility changes with logging techniques²³. According to the interviewee, the accessible amount using techniques current in 1995 was 1.5 million cubic metres a year, whereas the official sustainable harvest rate was 325,000 cubic metres per year, and the actual harvest rate in 1995 was around 750,000 cubic metres. Figure 5.3 summarises the status of the various tenure and control rights to forests. As already discussed, the country is predominantly forested and 87% of land is held under customary tenure. With 4 million cubic metres of timber licensed in 1995, of which 1.5 million cubic metres was technically harvestable, the timber industry was a dominant force in terms of actual forest management and control. The two largest timber companies operating in the country were estimated to control around 1 million hectares of forests for timber production, which was the equivalent of 37% of the total forest area of the country, and almost twice the estimated merchantable timber area.

Figure 5.3 Tenure and control of the Solomon Islands forest resource

Total land area	2,754,600 ha
Total forest area	2,668,700 ha
Area under state control	365,800 ha
Area under customary control	2,388,800 ha
Merchantable timber area	598,500 ha
Sustainable timber area	278,221 ha
Sustainable harvest per annum (volume)	325,000 cu m
Actual harvest 1995 (volume)	749,000 cu m
Actual harvest 1996 (volume)	791,000 cu m
Licensed volume 1995	4 million cu m
Harvestable volume 1995	1.5 million cu m
% of land area designated as protected areas	0.2%

Sources: Solomon Islands Statistical Bulletin (1987); Lees (1990); AIDAB/MNR (1995); interviews with Forestry Department officials, October 1995; interviews 1996.

²³ For example, helicopter logging allows extraction of trees on steep slopes which were previously physically difficult to access. Helicopter logging had just been introduced at the time of the first field visit in August-September 1995.

Thus, it is clear that, despite the failure by the colonial administration to establish a Permanent Forestry Estate, their objective of establishing a large-scale timber industry developed by overseas operators was nevertheless realised. The timber industry perspective is rarely revealed, although a stockbroker's analysis of the Kumpulan Emas Berhad subsidiaries in the Solomon Islands specifically addressed the customary tenure system as a source of potential difficulty and conflict for timber companies:

“PNG and Solomons share similar land tenancy systems, whereby native communities lay claim to the land (as opposed to the government). Potential conflict may emerge over land rights and access, where non-concession lands are infringed upon to reach concessions further inland. This problem is likely to be far less acute [In the Solomon Islands]...as: the largely Melanesian population is less hostile than communities in PNG;...” (Standard Chartered Securities, 1993: 8-9).

Although the Forestry Department failed to expand the Permanent Forestry Estate during the 1950s and 1960s, commercial logging took place on government-controlled land until the 1980s, after independence had been achieved. Whilst Bennett (1995) and Larmour (1979) identify the failure to establish an expanded Permanent Forestry Estate as a weakness in the development of effective forestry policy, in those areas where the state did have control they did not prove themselves to be competent managers. For example, during the colonial period, when a strong state might be expected, the Forestry Department did not have the financial or human resources to establish an effective reforestation programme on those areas of land which were under its direct control. Partly due to this, and partly due to a lack of effective on the ground control over logging companies, state forests became depleted (Fraser, 1997; SGS Forestry, 1995). This increased the momentum to look to customary lands for new sources of timber and legislation was amended in 1977, on the eve of independence, to allow logging licences to be granted on customary as well as alienated lands.

It was not only the colonial administration that had problems controlling forestry operations. Independent governments also proved themselves unable to control the industry on government-controlled land. One of the largest and most active logging operations in the Solomon Islands in the 1990s was Sylvania Forest Products, a subsidiary of Kumpulan Emas Berhad. This logging licence was wholly on government-controlled land on the island of Vangunu, Western Province. Environmental damage and breaches of logging codes were documented several times, with the logging licence being temporarily suspended four times between 1993 and 1995 (World Rainforest Movement and Forests Monitor, 1998). In an independent assessment carried out under the auspices of the National Forest Resources Inventory Project (NFRIP), in August 1993, a survey of a plot on the Sylvania concession found "The degree of canopy removal and soil disturbance was the most extensive seen by the authors in any logging operation in tropical rainforest in any country" (AIDAB/MNR, 1993:18). Reports of site visits to Sylvania operations in 1994 describe both environmental and cultural (tambu) site damage caused by the company:

"In summary, the environmental impacts of Sylvania's logging operation on Vangunu are among the most serious observed to date in Western Province. This is particularly disturbing site. An immediate consequence of the logging operation is deposit of silt in Marovo Lagoon from rivers flowing down from the eastern slopes of Vangunu Islands." (Western Province, 1994a)

"The tambu sites were clearly marked and it would have been difficult not to observe the bright red paint emblazoned on the trees on the site. For this reason, it appears that the damage caused by the logging operation is the result of a lack of understanding of what the tambu site markers represent or else there is total disregard for these sites by those involved in the logging process." (Western Province, 1994b:4)

Dauvergne (1997) in his comparative study of Indonesian and Solomon Islands state forestry policy and management, highlights the administrative weakness of the Solomon Islands state resulting in its inability to control the activities of commercial timber

companies and enforce environmental legislation, leading to unsustainable timber harvests and environmental degradation of natural forests: “In the Solomon Islands, state capacity is undercut by weak state legal powers over forests, attitudes of decision makers, cultural pressures on state members, political instability, bad policies, inadequate bureaucratic resources, and to a lesser extent, ties among state officials and corporate executives” (Dauvergne, 1997:2).

An oft-quoted feature of the political economy of the forestry sector in the 1990s was the close ties between national political figures and the logging industry, sometimes manifesting itself in bribery and corruption allegations and the common reference to the Solomon Mamoloni administration as being a “pro-logging” government. For example, Dauvergne (1997) and Fraser (1997) both point to the increased strength of the ties between political figures at the national level and the logging industry as a significant contributor to a failure to achieve a sustainable industry. There were claims that vested interests in the timber industry were responsible for the downfall of the NCP government in November 1994 after defections of MPs across the floor of parliament (Economist Intelligence Unit, 1995; Solomon Star, 1995a). Whilst the NCP government had been attempting to introduce sustainable forestry policies, the SINURP government, which took over the reigns in November 1994 until the next elections in 1997, was under the leadership of Solomon Mamaloni, who himself had a logging company. Several of his ministers and other senior officials were accused of taking bribes from logging companies (Solomon Star, 1995b).

However, even though the NCP government was actively working with bilateral aid donors, primarily Australia, Britain and New Zealand, to introduce sustainable forestry

policies and practices in the early 1990s, including the strengthening of the Timber Control Unit to monitor logging operations and exports, they failed to reduce the ever-increasing levels of round log exports or to stem illegal logging and transfer pricing activities. A consultant's report for the Ministry of Forests, funded by Australian bilateral aid money, investigated allegations of fraudulent activities and transfer pricing²⁴ within the industry (Duncan, 1994). According to this report, which analysed export and import data and logging and shipping costs, log export prices had been substantially under-reported in the Solomon Islands, a form of illegal transfer pricing. Duncan elaborated the extent to which the people and government of the Solomon Islands were being deprived of suitable revenues from logging activities:

"For the Solomon Islands, the loss of economic surplus to loggers in 1993 was at least SI\$36 million. There is convincing evidence that the Solomon Islands has also been losing large sums of money through under reporting of log prices. For 1993, when this problem could have been most serious, the loss is estimated at SI\$94 million. Thus, in terms of timber revenue foregone in 1993 because of the form of the logging contract and the likely loss due to under reporting of log prices, the Solomon Islands' total loss for 1993 is estimated at SI\$130 million - about four times Australian aid to that country in 1992-3" (Duncan, 1994:12).

Duncan calculated the amount of revenue loss and compared this to what could have been developed in terms of Solomons infrastructure with the same amount of money, being equivalent to 1,171 health clinics and 7,189 primary school class rooms.

The governor of the Bank of the Solomon Islands believed that transfer pricing was common practice in the Solomon Islands. According to the governor during an interview in October 1995, a report into transfer pricing activities was carried out by the

²⁴ Transfer pricing is undertaken by companies to minimise taxes such as corporation tax, royalties and export taxes, and in the case of the Solomon Islands is undertaken to transfer profits out of the country. Methods of transfer pricing include manipulation of book-keeping entries, under-valuing timber prices, selling to related companies outside the country at low mark-up rates, double-invoicing, mis-declaring species, under-declaring export volumes, under-grading etc (see Callister, 1992 for details of transfer pricing and other fraudulent activities in the tropical timber trade in the Asia Pacific region).

Solomon Islands Government but had never been made public. Analysis by Forests Monitor (1996) indicated that Kumpulan Emas Berhad (KEB) was involved in transfer pricing, as its Solomon Islands subsidiaries did not declare any profits within the country whereas the parent company's group accounts published in Malaysia showed that the Solomon Islands operations were the most profitable within the group. At the KEB annual meeting in December 1994, Chief Executive Lim Fung Chee said the company's timber division had accounted for 72% of pre-tax profits in the 1994 financial year despite timber accounting for only 13% of the year's turnover (Mellor, 1995b).

In conclusion, the above evidence indicates that the state successfully encouraged the development of a large-scale timber industry controlled by overseas private interests, even though it failed to establish a Permanent Forest Estate due to Solomon Islander resistance. However, the state subsequently failed to control the industry in a number of areas crucial to ensuring sustainability, in particular on economic and environmental grounds. Although it introduced regulations for the industry, it did not succeed in enforcing those regulations. Indeed, links between politicians and the private sector sustained and facilitated the growth of the private sector and its control of the forest resource. Not only was logging taking place at nearly three times the sustainable level in the 1990s, but also environmental damage was reported to be widespread. Although the central government was heavily reliant on income from the industry, analysts believed that the full value of log exports was not being realised due to poor policies, lack of enforcement and fraudulent activities within the industry. Thus, the weak state contributed to the increasing power of the timber industry, particularly in relation to its bargaining power regarding control of forests. The following section studies the

relationships between the timber industry and communities, exploring how the timber industry was able to dominate forest control in the Solomon Islands even on customary held lands.

5.4 Interactions between local forest communities and the timber regime

This section examines the interactions between local communities and the timber industry. By using the analytical framework outlined in Chapter Two, and in particular by focusing on issues of power imbalances between the bargaining parties and distributional conflict over the benefits and costs of timber exploitation, some of the complex and dynamic processes behind the relationships between local people and the timber industry can be analysed in relation to property rights institutions. Since the forest act was amended in 1977 to extend commercial logging to customary land, timber companies and local communities were involved in direct negotiations with regard to the assignation of timber cutting rights, according to formal procedures established by the state, with the communities retaining customary tenure of the land. For those who argue that local communities should be active participants in the development process, this may suggest a more equitable system, with landholders directly involved in forest management decisions, rather than having their land alienated by the state to form a Permanent Forest Estate. This was certainly the intention behind Solomon Islanders' resistance to land alienations for a Permanent Forest Estate during the 1960s described in section 5.3.1. However, an analysis of the relationships between the social actors reveals that these direct interactions have reflected the imbalances in power between the bargaining parties and have frequently led to distributional conflict, both between communities and the timber industry and within communities themselves.

In discussing the interactions between the timber industry and local communities and the subsequent influence on the evolution of property rights institutions, there are three key stages of the inter-relationships that can be identified, although in practice they form a continuing web of interactions. This section looks first at the assignation of timber cutting rights on customary land, including both formal and informal processes, and how asymmetries in power between the bargaining parties affected outcomes; it then discusses the effects of logging operations on local communities and the conflicts generated within and between communities and with logging companies; and finally, it presents data on the emergence of new social networks and institutions which have been established as a direct result of opposition to large-scale logging by a foreign-controlled timber industry.

5.4.1 Negotiating timber cutting rights

An examination of the negotiation of timber cutting rights needs to consider the formal procedures established by law and the informal processes that operated ubiquitously throughout the Solomon Islands in order to understand how the processes were manipulated to produce outcomes favourable to those with greater bargaining power. As described above, forest management policies in the Solomon Islands were geared almost exclusively towards commercial timber production by an overseas-controlled timber industry. Thus, whilst they retained customary tenure of the land, local communities were in effect agreeing to a timber company assuming control of the forest resource for timber exploitation. The formal procedures for the allocation of timber cutting rights involved a complex and lengthy set of procedures which included organs of the state at national, provincial and local levels as well as local communities and companies. The following is a description of the steps that were legally required.

A company wishing to log a particular piece of customary land was obliged, before starting negotiations with landholders, to obtain the consent of the central government to negotiate. It therefore made an application (called a 'Form 1') to the Commissioner of Forests (national government), paying a licence fee at this stage. If the Commissioner accepted the application, notification was sent to the provincial government and the relevant local Area Council chairman. The Area Council was then responsible for organising a Timber Rights Hearing and for giving one month's notice of the date, location and time of the meeting. The meeting was supposed to involve all relevant landholders, who identified themselves as a result of the notification of the Timber Rights Hearing. The meeting therefore had to be advertised in an appropriate manner (e.g. by radio and/or newspaper) so that the relevant landholders would know of the meeting and attend. At the Timber Rights Hearing the landholders and Area Council were supposed to discuss the application for logging on their land and whether all the relevant landholders were present, they were supposed to decide what timber rights were to be given and how the profits would be shared by the landholders, and they were to decide how the provincial government would take part in the operation. Written minutes of the Timber Rights Hearing were taken. At this stage, if the application to log was rejected or if there was no agreement amongst landholders on any of the points requiring discussion, then the application was rejected and notification was sent direct to the Commissioner of Forests, who advised the company. If there was agreement on all points at the Timber Rights Hearing, then a list of all landholders and the recommendation to proceed were drawn up and advertised by way of a Public Notice for one month. If the agreement was disputed at this stage by any of the landholders then the dispute was referred to the Customary Land Appeal Court. If there was no resolution of the dispute by this court then the Commissioner of Forests was notified

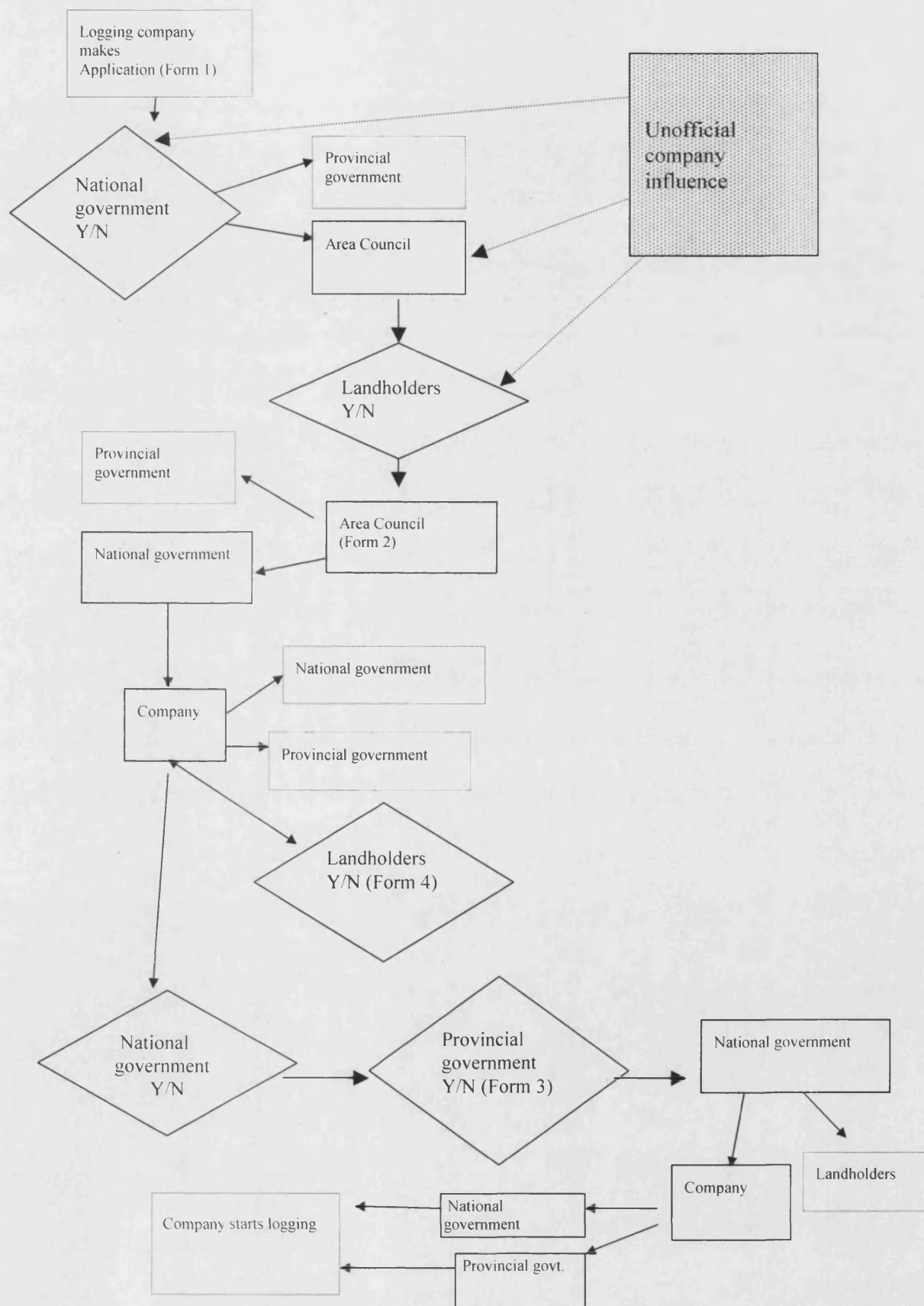
and the company advised that timber rights had not been allocated. If the dispute was resolved, or if there was no dispute during the one month's public notice, then a Certificate of recommendation and land ownership was issued (known as a 'Form 2') and sent to the Provincial Secretary who passed it to the Commissioner of Forests who notified the company.

At this stage, the company was required to carry out detailed resource surveys and identify those areas to be excluded for environmental and social reasons. They were required to draw up a Five Year Plan, a Harvesting Plan for the first year and a Reforestation Plan. A copy of this information was supposed to be given to each relevant landholder group and the company was to brief a provincial representative and a forestry division representative of its plans, timescale and proposed terms and conditions. The company was obliged to publish the plans and maps and give two months' notice to the community for the date, time and place for the public negotiation of the Standard Logging Agreement (known as a 'Form 4'). At this meeting, the landholders and company were present together for the first time, and both parties could have legal advisors present. In addition, the both the province and the forestry division could have observers present. If agreement was reached, then Form 4 was signed by the company and at least 5 representatives chosen by the landholders. Within 14 days of this agreement the company notified the Provincial Secretary and the Commissioner of Forests.

The Commissioner of Forests then discussed with the Provincial Secretary whether all proper procedures were followed and if in agreement the Provincial Secretary issued a Certificate approving the Standard Logging Agreement Negotiation (called a 'Form 3').

Rejection or approval at this stage was notified to the Commissioner of Forests who then advised the landholders and company within 14 days. The company then prepared annual logging plans which were given to the Commissioner of Forests who then gave them to the Provincial Secretary who advised the former if they were acceptable. He then in turn issued the licence to log. This was the point at which logging could officially commence. A new plan was supposed to be drawn up by the company each year which was to be approved by the Commissioner of Forests and Provincial Secretary who then issues the annual licence. Figure 5.4 gives a schematic diagram of the various stages in the procedure. The diamond shapes on figure 5.4 represent the stages where the application for timber cutting rights can be rejected.

Figure 5.4 Formal procedures and informal processes for allocation of timber cutting rights



An analysis of the timber rights negotiation process itself, highlighting the key decision-making stages, is useful for identifying inherent power imbalances. The procedure remained top-down in that negotiations started between timber companies and central government, filtering down through the tiers of government to reach local communities last of all. Both national government in the shape of the Commissioner of Forests and provincial government in the shape of the Provincial Secretary were in a position to accept or reject the proposal at certain stages.

The landholders first heard of the timber cutting application after it had been submitted to the national, provincial and local governments. The local Area Council advertised a Timber Rights Hearing, at which all legitimate landholders were supposed to attend. The practical difficulties of ensuring that all legitimate landholders were made aware of the Timber Rights Hearing were great, given the remoteness and isolation of many villages, accessible only by canoe or on foot and the lack of telecommunications facilities. The radio was the most accessible way of communicating, but there was no guarantee of reaching the target audience. And despite the fact that the whole concept of timber cutting rights arose because local communities wanted to deal directly with timber companies, the only occasion of the whole procedure when land holders and the company met face to face was for the negotiation of the Standard Logging Agreement, which took place after timber cutting rights had been assigned to the company.

The state did little to try to redress the power imbalance between timber companies and local communities. Although producing leaflets to inform local communities about formal procedures, the formal procedures themselves remained complex and efforts by the Timber Control Unit to explain them in leaflets did little to make them more

transparent, particularly given the high levels of illiteracy and the fact that the leaflets were in English, although this was not widely understood in the rural communities. There are 87 local languages in the Solomon Islands, and these represent Solomon Islanders' first language. Solomon Islands pijin is the *lingua franca* but is not spoken by everyone, particularly old people. English is the language of government and business but is usually the third language for those Solomon Islanders who speak it. All forestry laws and regulations, for example, are in English. The complexity of procedures, the geographical remoteness of many communities (often only accessible by motorised canoe and/or lengthy and strenuous walking), the abundance of local languages, poor access to education and high illiteracy rates, particularly amongst women (Adams, 1997), meant that many rural people were effectively excluded from informed involvement in forest management decisions and the timber rights negotiations in particular.

In addition, the process did not adequately accommodate the complex property rights claims which local communities had with regard to the forest resource, in particular the different levels of claims. Different members of the community have different levels of claims to land and resources based on complex sets of social relations (Hviding, 1996; Burt, 1994; Rence, 1979). The literature describes the differentiated gender roles of Solomon Islands societies, with men traditionally being more associated with cash-generating production, such as decorative wood carving, canoe building and timber production and women with subsistence and domestic production, although men and women are traditionally involved in creation and maintenance of gardens for subsistence food production. The complexity of social institutions involve different use rights of different parts of a community's land and resources (Adams, 1997; Bayliss-

Smith, 1993). Whilst women inherit land rights, and bilateral descent is traditionally important, the matrilineal rights are being undermined by development pressures, in particular the timber industry (Adams, 1997; Hviding, 1996; Burt, 1994). This reinforces the fact that timber, and decisions about timber production, are considered to be man's business.

It was clear that, despite the apparent inclusion of local communities as partners within the decision-making process, power imbalances between the stakeholders were inherent in the formal procedures. The complexity of the formal procedures effectively put them beyond the access of many rural people, disadvantaging them in a relationship with overseas timber companies. Conversely, the complexity of custom tenure and use rights to forest resources made identification of relevant landholders a task beyond most outsiders, leading to the distortion of power structures within communities.

Furthermore, the role of the state and its relationship to communities is ambiguous, as has been noted by Pathak (1994) in his study of the relationship between the state and peasant society in India, on the one hand facilitating and encouraging the allocation of timber cutting rights, whilst on the other hand being embedded within communities.

Notwithstanding the problems associated with the formal procedures outlined above, the system of negotiating and allocating timber cutting rights was open to abuse, with informal processes also having an influence on outcomes. In particular, companies were able to influence decision-making at key stages in order to obtain positive decisions. Informally, companies had usually approached either key landholders or key members of the Area Council or key members of the national government (or a combination of the three) to ease the path of the negotiations. These informal processes were often the

cause of social disruption, creating new rural elites at the village level and allegations of corruption and illegality. However, from the company's perspective, this unofficial process was usually the only way to be reasonably sure of a successful outcome to their application before becoming involved in the lengthy process itself.

A common complaint made by interviewees was that in many cases not all custom landholders with a legitimate claim were involved in negotiations and signing of logging agreements with logging companies. According to interviewees and anecdotal information recounted by NGOs, there appeared to be a "divide and rule" tactic being carried out whereby company representatives cultivated one or two community members who were given sums of money or were flown to Honiara or even Kuala Lumpur and introduced to a lifestyle at the opposite end of the spectrum to that which was experienced in the village. As a result of these inducements, these landholders negotiated timber cutting rights with companies supposedly on behalf of the community but in fact often without consultation or authority to represent them²⁵. It was explained by community members and NGO representatives interviewed that it suited company negotiators, faced with the complex task of identifying all the community members with custom tenure over a piece of forest and gaining their approval to log, to approach certain members of the community with financial rewards or foreign trips in return for their self-appointment to the role of community representative. This was undertaken either in anticipation that the selected person(s) would convince all other relevant landholders to agree to the deal or that these signatures would suffice to permit logging to go ahead. Thus, the company could report to government that negotiations with the proper community authorities had taken place and approval for the logging scheme granted. This was similar to the process which took place

²⁵ This was often cited as a tactic of company negotiations in interviews not only in the Solomon Islands but also Papua New Guinea and Vanuatu.

during the colonial period when it was expedient to identify key village figures to deal with for administrative purposes but served to undermine pre-existing decision-making processes (see section 5.2 above). Numerous anecdotes were recounted not only by Solomon Islanders but also by expatriate aid workers of loggers arriving by helicopter or boat with money for one or two token landholders in return for their signatures on logging agreements. These were powerful inducements to break down communal negotiating rights and resulted in new elites being formed whilst the majority of land holders were disempowered from the process. Interviewees described the divisions which were being created within communities over whether logging should be allowed and the power imbalance that often resulted when pro-logging voices won or, as described above, went ahead and made agreements unilaterally.

The tactic of singling out a representative was observed on two occasions during field work. In one instance, a Korean businessman targeted one particular man from Malaita and his family in order that this Malaitan would negotiate with members of his community to sign logging rights to the Korean businessman. Pressure was exerted daily on the man, with the Korean taking every opportunity to persuade and ingratiate himself with the Malaitan and his family. The man already had a small local logging company in his village on Malaita and a guest house in the capital. The businessman wanted to buy both and extensive logging rights in Malaita with the prize being a bible study course in New Zealand for the Malaitan. This deal subsequently went through. On another occasion, a man from Western Province was observed in Honiara meeting with a logging company representative to sign an agreement for logging rights. According to a wantok (someone from the same area), he doubted whether the rest of the community knew what the man was doing.

On a field visit to Isabel island in 1996, several letters were studied which were kept on file by the provincial government from landowner groups to Isabel Timber Company (ITC) and its owner at the time, Axiom Forest Products, and to the provincial and central governments, claiming that agreements were signed without understanding what was in them, or by the wrong people, or they did not realise what they were doing. For example:

“It seems that LR703 and 704 [registered plots of land] are also included in the proposed areas for Axiom to log. Some of our registered and non-registered trustees were called from gardens or while performing other activities to sign against their names and you have claimed that they have now signed an agreement with the company. The signing of those papers were done in complete ignorance.....” (Extract from a letter to ITC on 26/3/92 by a trustee).

Another piece of correspondence, this time from the Bishop of Isabel stated that:

“If you were to investigate the signatures of the landowners, you will find that some of them do not have the power to sign. In some instances I am aware of, the family trustees of the land have refused to sign, but other members of the family, not being trustees, have signed.” (Letter from Bishop of Isabel dated 16/8/91 to Commissioner of Forests).

In addition, the point was made in correspondence that landholders had no access to legal advice or other technical advice when dealing with companies. The Isabel provincial legal advisor (a VSO, as was usually the case for these positions in the Solomon Islands at that time) stated in discussions in August 1996 that she had been intimidated into leaving timber rights hearings by members of the Area Council which she had attended in an official capacity and with the intention of representing the landholders' interests.

The role of the Area Council in the determination and allocation of timber cutting rights often proved a controversial area, open to misinterpretation and abuse. Whilst the Area Council, as the lowest tier of government, should be closest to the people in terms of accessibility and accountability there were numerous reports of Area Councils in a number

of provinces operating both beyond their legal scope and being influenced by outside interests, including logging companies. The Area Council was not empowered to determine timber rights nor to identify all relevant landholders. Its task was to arrange Timber Rights Hearings and advertise them in such a way that all relevant landholders knew about the scheduled meeting. They were then bound to report on the outcome of the hearing, with an application being rejected if either the community did not want to proceed or if there was a dispute as to who were the legitimate landholders.

In a high court case in 1992 (civil case no.52 of 1992), a logging licence issued to Hyundai Timber Company Limited and the Timber Rights Determination were revoked after the court found that the certificate of customary ownership in Vella La Vella, Western Province, was falsified. The court found that at the Vella La Vella Area Council meeting in October 1990 which lasted two days and over 100 people attended, an unsigned minute recorded the actual ruling - which was that land ownership was disputed and therefore timber rights could not be granted. This unsigned minute was subsequently altered by the President and Secretary to grant timber rights and issue the certificate of customary ownership.

One key informant from the Western Province said that the Area Councils were not representative of the local communities and he was working with others in the Marovo Lagoon area to try and revive the local customary tribal institutions (*butubutus*) so that they, rather than an externally created local body, formed the basis of local level representation.²⁶ He described how the colonial administration introduced a lower tier

²⁶ Hviding and Bayliss-Smith (2000) analyse in detail the evolution and role of *butubutus* in the Marovo Lagoon within the context of local social institutions and in relation to outside factors and development contexts.

called Areas Committees to bring a local perspective to colonial rule, but that these were not representative. These became the Area Councils post-independence. The key informant also described the role of the chief traditionally as a trustee to the community, supposedly listening to the community and representing them rather than making decisions on their behalf. Other interviews with community members showed that the role of chief was crucial and contested, indicating the extent to which new rural elites were being created by timber revenues and influence, with individuals claiming to be chiefs or clan leaders when they were not. This can be viewed as a continuation of the process started by the imposition of colonial rule, which undermined traditional roles and relationships between chiefs and others, replacing it with forms of authority more conducive to dealing with a colonial administration. As a result, the Area Councils and chiefs (whether self-designated or not) often did not properly represent the community and had a credibility deficit amongst local communities.

The Area Council was not the only level of government that appeared to be involved in informal processes for granting logging licences. According to a confidential annex to a 1996 document, in 1991-2, Isabel Timber Company's parent company at the time, Axiom Forest Products, obtained concessions to log large parts of Isabel island, "even in some cases without the relevant Area Council having met. Hograno Area Council met, and even banned them from coming into the Area, but they were still granted the concession from central government" (anon, 1996:2).

To summarise, asymmetries in bargaining power between the negotiating parties appeared to influence the outcome of timber rights negotiations, with differences in access to information, the use of financial inducements and political connections all affecting both

the formal procedures and informal processes surrounding the allocation of timber cutting rights. By singling out specific members of a community and offering them cash or other “sweeteners” to sign away timber cutting rights, private timber interests subverted communal negotiating rights and traditions, facilitating the creation of new local elites. This appeared to contribute to a disruption of pre-existing institutions based on traditional cultural practices, a process which was started during the colonial period. The involvement of political figures in the industry at national and local levels provided avenues for exploiting political connections in order to influence outcomes, sometimes in a fraudulent manner. Therefore, despite the apparent equitability of the system, whereby local communities had direct negotiating rights and power of veto, an analysis of the relative bargaining power of the parties shows how those with access to finance, information and political influence were able to achieve favourable institutional outcomes, notably access to timber resources. The ongoing relationships once timber cutting rights were assigned are described in the next section.

5.4.2 Conflicts over logging

The nature of the relationships between local communities and timber companies once timber cutting rights had been assigned was often characterised by continued power imbalances, due to a lack of understanding of their rights by local people and the virtual impunity with which forestry activities could operate due to weak enforcement. As described in section 5.3 above, even basic managerial and technical forestry tenets were often ignored by timber companies operating in the Solomon Islands, with companies routinely breaching Standard Logging Agreement regulations and the under-resourced Forestry Department unable to monitor logging operations and enforce regulations. On Isabel Island, during an interview in September 1996, the only Forestry Department

Timber Control Unit officer stationed on the island described how he had no transport or other means to check log export volumes or logging operations, and was reliant on timber companies to offer him a ride in a motorised canoe to log ponds. Discussions with local people revealed that many of them assumed that this officer was accepting bribes from timber companies to turn a blind eye to illegal activities. Local communities were usually much better placed than the state to know what a company was doing, particularly on their land, but because of the unequal nature of the relationship they often felt disempowered. For example, as a result of concerns about the negative environmental consequences of logging operations on Isabel Island, several landholders requested that an independent environmental and social impact assessment (E&SIA) be undertaken on their land. One of the landholders was so intimidated by a logging company employee that he would only enter his land with the E&SIA team after returning to the provincial capital, Buala, and being assured by the Provincial Secretary himself that he was within his rights to do so (Forests Monitor, 1997).

Adding to a sense of powerlessness amongst people interviewed, including state officials, was the fact that they did not know who they were dealing with at the corporate level, either in terms of not knowing or understanding shareholdings or in terms of senior management being remote from site-level operations. Not only NGO and community interviewees but also forestry department officials were not always aware of the current state of ownership of a particular licence. Key informants from Dorio, Malaita Province, described how they were unaware that the company they had entered into timber cutting rights agreement with, “Waibona Logging and Sawmilling Company Ltd”, had sold the rights to a company controlled by overseas interests, “Golden Spring”. This caused problems for them when trying to hold the company accountable through the courts for

damage caused, as they did not initially know who was responsible (group discussion October 1995 and letter from landholders' lawyer to the company dated 19/6/95).

Distributional conflict as a result of the timber industry occurred within communities and between communities and the timber companies. Land disputes within and between communities became more common as a result of the commercial timber industry (Hviding, 1996; AIDAB/MNR, 1995; Burt, 1994; Post Courier, 1995). Logging was described as "splitting the family" with some wanting commercial logging and others wanting to undertake small-scale logging themselves. "For this, brothers publicly argue against brothers. Fathers are at odds with their sons and daughters as well as their sisters. Logging is splitting the family, church and tribe" (Solomon Star, 1995c). One family's stand against Hyundai logging company was reported in a New Zealand newspaper: "When bulldozers razed their coconut plantation, the Hitukera family had no source of income. When the bulldozers headed up the hill and ploughed their vegetable gardens, they were left with no food. It was only by standing in front of the machines that they saved their houses. Describing that encounter, Teddy Hitukera says: 'we wept and wept, we shouted and shouted'" (Evening Post, 1995). The article describes how this family claimed the land whilst the company signed a lease with relatives of Hitukera's who believed they owned the patch of land. According to the article, this family and another had become isolated from their neighbouring communities because they were making a stand.

Once logging had taken place, there seemed to be widespread disillusionment with the outcomes, even when interviewees may have been in favour of logging to begin with. Complaints centred around a failure to provide promised infrastructure and other material

benefits and the severe degradation of local environments, especially water sources. In these instances, the prospective benefits which had been promised by logging companies failed to materialise. Logging appeared to take place with little regard to the carrying capacity of the resource nor to the role of the forests as providers of multiple uses rather than single commodity extraction. There was a general sense of powerlessness expressed by those interviewed, other than trying to claim compensation after the event.

A common complaint amongst NGO representatives and landowners interviewed throughout Melanesia was that logging companies rarely fulfilled promises made at the outset to communities to provide facilities and infrastructure in return for rights to log. In October 1995, 50 landowners and community members from Dorio, Malaita Province came to Honiara to seek compensation for environmental damage done to their land by the company Golden Springs/Waibona logging. They were interviewed in the presence of a senior representative from Solomon Islands Development Trust (SIDT). Originally the community thought the logging would be a good thing - their parliamentary representative (who they later found out was a director of the company) said it was good for development. The company promised a school, a clinic, permanent roads, bridges, none of which had happened. The company logged the land and disappeared but subsequently returned, wanting to start logging another area of the same landholders' land. The landholders wanted to get an injunction against this new development until compensation had been paid for damage on the other land. To make matters more complicated, the landholders made the agreement with local company Waibona logging, who then sold the licence to Golden Springs. The community expressed concern over a number of breaches of the agreement by the company and complained of the damage caused to their water supply, which they claimed was causing health problems amongst villagers.

This complaint was substantiated by an inspection to three water sources in the area, Ward 26, which was undertaken in April 1995 by the Environmental Health Division based at Auki, Malaita Province (Malaita Province, 1995). This inspection found that the Fulai river, which was used by approximately 800 people for bathing, cooking, washing, drinking and other domestic purposes, had suffered damage and pollution directly as a result of the logging operation, causing diarrhoea and "red eye". The report outlined similar damage caused by logging operations at two other water sources in the area. In a letter from a lawyer representing 24 landholding groups to Waibona logging and sawmilling company this damage as well as other breaches of contract were cited. See figure 5.5 below for a summary of the breaches.

Figure 5.5 Breaches of the Standard Logging Agreement at Dorio, Malaita Province

Activity which Breaches the Standard Logging Agreement	Clause No.
No sawmilling facility has been set up	clause 2
Water sources have been damaged	clause 4
Small trees on steep slopes (above 30 degrees) have been cut	clause 8
Top soil was not safely removed and retained in a pile for re-covering the area cleared as a log pond	clause 14
Due royalties were not paid to the landholders as a result of malpractice in grading, measuring etc	clauses 16 and 33
The company failed to remove waste from the bush within three months	clause 17
Surface damage through excessive blading and bulldozing of soil	clause 20
Reafforestation has not been carried out	clause 21
No agricultural scheme has been developed	clause 22

Source: letter to Robert Wong, MD of Waibona Logging and Sawmilling from legal representative of Landowners Committee, Kwariekwa Village, West Kwaio, Malaita Province.

The letter stated that this landholding group were prepared to withdraw the case provided they received SI\$6.8 million as compensation and that this figure was negotiable. It must be assumed that the company failed to offer acceptable levels of compensation because of

community representatives' subsequent presence in Honiara in October 1995, attempting to get an injunction against the company.

That conflict existed amongst Solomon Islanders over the benefits of commercial logging was clear during interviews. Whilst certain communities, or community members, saw commercial logging as a way of accessing cash by letting someone else develop the resource, others were concerned about either the ecological consequences or they questioned the likely financial returns in the longer term. Claiming compensation for damage after logging had taken place was another way of accessing cash from commercial logging. According to the SIDT representative present at the discussion with landholders from Dorio, SIDT had sent field representatives to the area when they heard that communities were thinking of signing a logging agreement to warn them about the experiences of others and the problems they could expect. However, according to the interviewee, the community was not interested and did not make the SIDT field people welcome. The SIDT representative stated that now the money was finished, they had lost their trees and their environment was degraded, they realised they had made a mistake and wanted SIDT's help with getting a lawyer and an injunction against the company.

Interviewees on Isabel Island, including members of the provincial executive, spoke about broken promises made by logging companies operating there who had promised schools, clinics and permanent roads, none of which had materialised. During interviews in September 1996, one landholder who had entered into an agreement with Isabel Timber Company (ITC) expressed bitterness that all he had seen after two years' operations were an outboard motor and damaged land. His sons wanted to get rid of the company and get involved in eco-timber production, but the man wanted compensation. An Environmental

and Social Impact Assessment undertaken by a forest ecologist subsequent to the interview showed a number of serious breaches of the Standard Logging Agreement at several ITC sites, as well as broken promises regarding infrastructure provision (Forests Monitor, 1997).

Conflict within communities appeared to exist not only regarding the distribution of benefits from commercial logging, but also in relation to those who suffered most from the negative environmental consequences. Interviewees on Guadalcanal stated during group discussions in October 1995 that the presence of logging operations on communities' land had led to villages' gardens (vital for subsistence provisions) having to be located at several kilometres from the villages, putting additional burdens on the women, children and old people who collected food. This was also reported in Vangunu and Roviana, Western Province (SIDT, 1993; CAA, 1990). Shellfish and other marine resources used for subsistence were widely reported to be destroyed as a result of pollution by logging operations (CAA, 1990; Baenesia, 1993). Data on health implications associated with the impacts of logging have not been systematically collated but there were anecdotal accounts, see the Dorio case above. Also, a GP working in Western Province reported:

“...the health of these islanders deteriorates dramatically in areas which have been logged. Their fishing and gardens are destroyed so we see malnourished children in the hospital. Their social structure is destroyed so we see crimes of violence and venereal disease. Their water supply is destroyed so we see skin infections and water-borne diseases” (Collee, 1994).

The evidence obtained in interviews of dissatisfaction with commercial forestry operations was supported by village surveys of 116 villages conducted as part of the National Forest Resources Inventory Project (NFRIP) in 1995. The majority of villagers surveyed did not consider overseas economic interests developing their resource as

appropriate, and preferred to consider local exploitation of resources. See figure 5.6 below.

Figure 5.6 Survey results of preferences for various forest development options

Development options	% Yes	% No	% maybe or don't know
Logging by timber company	6	68	26
Small scale logging or sawmilling by landowners	83	0	16
Plantation forestry by timber company	3	88	9
Plantation forestry in joint venture with company	14	55	31
Plantation forestry by landowners	60	8	32
Cash crop development by plantation company	3	92	5
Cash cropping by landowners	78	6	16
Tourism run by outside company	5	87	8
Village owned tourism project	45	14	41

Source: AIDAB/MNR 1995

The NFRIP survey also found villages reporting extensive evidence of environmental degradation. The surveyors undertook a questionnaire survey in 28 villages, to ascertain the incidence and type of environmental problems experienced by villagers, see figure 5.7 for the responses.

Figure 5.7 Survey results of problems associated with commercial logging reported by communities

Problems	% of logged villages which reported problems after commercial logging had taken place
Spoilt streams	100
Soil damage	92
Fewer building materials	80
Land disputes	80
Less wildlife	72
Damage to gardens	68
Tambu sites disturbed	60
Damage to mangroves	20
Other problems	64

Source: AIDAB/MNR, 1995

Solomon Islanders did not remain passive bystanders to the changes brought about by the introduction of commercial logging, and there has been a history of resistance to changes they felt would not be in their best interests, see section 5.3.1 above. Since the early 1900s, local communities offered resistance to land alienation and projects that undermined their communal property rights and custom practices. During the Phillips Land Commission held between 1919 and 1923, 75 claims against land alienations carried out under the Waste Land Regulations were heard. The hearings resulted in large tracts of land reverting to customary ownership, with the evidence presented by Solomon Islanders being described as “sophisticated and well-presented”: The record of the hearings “show a surprising understanding of both the procedures and the facts of land alienation for such an early period and they knew how to argue their cases very competently” (Ruthven, 1979:245).

Section 5.3.1 described the successful resistance to land alienations sought by the newly established colonial Forestry Department in the 1950s and 1960s. In addition to resistance to government policies, resistance was also mounted against particular companies: Levers Pacific Timbers was the main focus for opposition by Solomon Islanders initially (Fraser, 1997). Levers had a long history of involvement with the Solomon Islands, nearly as long as the British Protectorate itself. They were the main copra plantation and production company in the country, becoming established in the Solomon Islands in the early 1900s and being intimately bound to colonial land alienation policies²⁷. A Levers subsidiary, Levers Pacific Timbers Ltd, one of the first timber companies to establish operations in the Solomons, began logging on Gizo island, Western Province in 1963, and subsequently

²⁷ See Judith Bennett’s (1987) detailed history of the plantation economy in the Solomon Islands for an account of Levers’ impacts on the country and its people.

established operations on Kolombangara and New Georgia islands, provoking conflict with and between local communities (CAA, 1990; Rence, 1979).

Resentment at Levers' operations in North New Georgia turned to violence in 1982 when a company camp was burnt by local people, with houses and equipment being destroyed. Later in the same year, villagers stopped the company landing bulldozers by burning the wharf. Then in 1984 and again in 1986 there were further attacks on company property. In October 1986, the company ceased its Solomon Islands operations altogether. Other instances of violent protests against foreign-controlled logging companies have been recorded, and Malaysian logging company managers being described as turning "prematurely grey" because of the level of hostilities (Mellor, 1995a). For instance, in 1994, villagers in northern Marovo set fire to five bulldozers belonging to Golden Spring on New Georgia Island (Tickell, 1994). In 1995, Earthmovers Ltd had \$400,000 worth of equipment set on fire (Mellor, 1995a).

The most publicised logging conflict in 1995 was the one regarding the island of Pavuvu, which, unlike previous protests, became a national issue. The land was alienated in 1905 under the "Waste and Vacant Land Ordinance" as uninhabited land. Lease rights were assigned to Levers Pacific Ltd in 1907 for 999 years. Since the 1960s the indigenous community laying claim to Pavuvu had been campaigning to have their lands returned to customary tenure. However, upon Levers' withdrawal from the country in 1986, logging rights were given by the government to Mavingbros, a Malaysian company owned in turn by another Malaysian company, Nila Wood Industries Sdn Bhd. Protests erupted in 1995 as the logging company moved in and prepared to start logging. It appeared from newspaper articles that there were two

separate issues surrounding Pavuvu that were amalgamated by government in order to justify its activities. The Russell Islanders had been promised their land back and a resettlement plan. This they apparently approved of, according to a government survey cited in the Solomon Star (1995d). However, the government used approval of the return of land and a resettlement plan to signify approval of logging the island prior to its return. According to NGOs, Russell Islander representatives and opposition politicians, the majority of Russell Islanders were against logging (Solomon Star, 1995e).

The government took a heavy-handed approach in dealing with the unrest caused by logging on Pavuvu. Field Force personnel were sent to the island in April 1995 in response to civil unrest there, with NGOs claiming that the Field Force was sent to protect company equipment and personnel (SIDT, 1995). The response to NGO criticism was a threat to crack down on their activities (Roughan, 1997). In the most serious development, one of the community leaders protesting against logging, Martin Apa, was found dead in suspicious circumstances on October 30th and in January 1996 friends and relatives vowed to undertake their own investigation because of police inaction (Solomon Star, 1996b).

The Pavuvu issue was one of the most serious national news stories of 1995, with most people interviewed knowing about the situation there. One NGO, Soltrust, which promoted small-scale, community eco-forestry initiatives, estimated that the forests on Pavuvu which were awarded to Mavingbros for logging were worth SI\$400 million (Soltrust, 1995). This led to claims by NGOs that the government was facilitating foreign company profits at the expense of the needs of the local community. A survey

carried out by another NGO, Solomon Islands Development Trust, found that just over half of the people questioned in the capital (Honiara) believed that the government had sent the Field Force to Pavuvu to protect the loggers. The vast majority of those polled believed that the Pavuvu Islanders themselves, and not the government, should decide on the form of development to take place on the island (SIDT, 1995).

In conclusion, community level opposition to large scale logging appeared to be widespread throughout the Solomon Islands during field visits in 1995 and 1996, even though it was clear that certain members of communities in particular were benefiting from the timber industry. This opposition was apparent when talking to local people even on a casual basis, logging being the pre-eminent topic of debate and discussion during the period of fieldwork. Opposition and conflict seemed to be largely based on several factors: the lack of benefits to communities in cash or infrastructure; seeing financial benefits accrue elsewhere, with particular resentment against those community members who did benefit; the environmental damage caused and the hardship that resulted in terms of loss of access to NTFPs; and the sense that communities were losing control of their forest resources, even in situations where customary tenure still existed.

5.4.3 The emergence of new institutions

In response to the growing opposition to large scale logging in the Solomon Islands, new institutions emerged in the 1990s that attempted to blend customary traditions and approaches with contemporary concerns about rainforest protection and sustainable development. External actors such as national NGOs (especially Solomon Islands Development Trust and Soltrust), international NGOs (such as WWF and Greenpeace) and provincial governments all positively supported this. Two of the most active indigenous

NGOs, Solomon Islands Development Trust (SIDT) and Soltrust, developed programmes designed both to educate rural Solomon Islanders about the negative impacts of commercial logging and to provide training and assistance for the establishment of community eco-forestry projects. The latter strategy, which evolved in the 1990s, was seen as an essential ingredient in developing more culturally appropriate development rather than just engaging in anti-logging campaigns. To that end, in 1991, SIDT created a Conservation in Development unit to encourage community development of non-timber forest products and was involved in the development of an eco-forestry training school at Komuniboli on Guadalcanal, setting up an eco-forestry unit within SIDT in 1994. Soltrust, together with its marketing arm Lumi Tugetha Holdings, had the specific aim of assisting local communities to establish environmentally sensitive small-scale timber production that met international eco-forestry standards of the Forest Stewardship Council (FSC).

During field work, key informants described three community-level initiatives that, although developed separately, in each case sought to promote community control of the process of resource development and use as an alternative to commercial logging. A key informant described how, on Vangunu island and other parts of the Marovo Lagoon, villagers were concerned about the impact of large-scale logging as well as local over-exploitation of natural resources, so they developed their own local resource management plans to both provide an alternative to commercial logging and a means to manage their resources more sustainably. The project sought to reassert control of resources at the local level, with the involvement of the whole community through

butubutus, the traditional local institution for managing resources at the clan level²⁸. To this end, two separate but complementary institutions were formed to co-ordinate this, the Marovo Butubutu Development Foundation and the Marovo Lagoon Women's Council, the latter specifically to represent women's needs and wishes within the project. The key informant described how the initiative was supported by the WWF for the last few years as the Community Resource Conservation and Development Project (CRCDP).

The key informant described the crucial turning point for his community being when the chief of Michi village (the key informant's uncle), without authorisation from the whole community, came to Honiara to talk to company representatives and the government about a commercial logging deal. The key informant acknowledged that, prior to this event, increasing population and the growing demands of the cash economy had started to lead to over-exploitation of resources by local people and that this was leading to shortages. The impending threat of a commercial logging deal precipitated the whole community to sit down and discuss options. They decided that resource planning was the key and would lead to alternative development. At the time of the interview (October 1995), the village had a resource management plan which had been in place for the last two to three years. The first plan to be drawn up was a marine resource management plan. They had also tackled the issue of pollution, with a waste management plan being in place, including oil and petrol disposal. There were also population repair areas in reef areas which were over-fished and an eco-tourism site had been established on a nearby uninhabited small island. The cash from this went into developing the community resource plan. According to the key informant, the reason

²⁸ See Hviding (1996) for a detailed analysis of *butubutus* as clan-based social organisations and their inextricable links to the land, and the evolution of complex rules and rights regarding use of resources.

for building the resort (all of local materials and in a traditional style) on a nearby island was so that there should not be too much contact between tourists and locals because they wanted to avoid some of the problems associated with wealthy foreigners coming into small communities and disrupting their normal lives. The resort was built to cause the minimum ecological damage. At the time of discussions with the key informant, three communities including Michi had already signed up to participate in the resource management plan and another seven wanted to. The next resource management plan to be developed was for the forest, which they were intending to start in January 1996.²⁹

According to the key informant, in addition to natural resource management, one of the objectives was to revive their custom and culture, with the elders teaching old traditions alongside modern education. These traditions had been lost because a lot of children were sent away to school where they were taught the lingua franca and mainstream education. According to this description of the project, there were both resource management and local institutional objectives. The key informant's opinion was that it was a radical position to allow women to be involved in the decision-making and that in order to encourage their meaningful participation this was done through holding separate women's meetings to discuss resources management and their needs and wishes which were then included in the development of the overall plans, with the Marovo Lagoon Women's Council (MLWC) mediating input. The acknowledgement of gender inequalities within resource management planning at the local level was borne out by a study into the CRCDP that analysed the gendered roles and relationships within households in Michi and another project village, Nazareth (Adams, 1997). The study concluded that, although traditional Melanesian societies are relatively egalitarian at the

²⁹ Hviding and Bayliss-Smith (2000) provide a detailed analysis of the evolution of the Marovo local resource management scheme and the main protagonists and objectives.

village level, roles and access to resources within households were strictly determined by gender. As a result, Adams also concluded that, as newly emerging community resource management institutions, both the MBDF and the MLWC played complementary roles that should be nurtured.

The Isabel Sustainable Forest Management Project (ISFMP) on Isabel Island was devised by the provincial government in response to communities applying to log their own forest resources rather than sign away rights to foreign logging companies. The initiative received funding from the EU to establish eco-timber production, being timber produced on a small-scale by the forest landholders with conservation areas specifically set aside as part of each local-level plan. Interviews with the project manager and counterpart manager³⁰ in 1996 and again in 1998 with the project manager (who had since become the project advisor), described how the ISFMP came about. In 1991, the Isabel Provincial Secretary and planning officer toured the island to meet with senior village people in every Area Council district around the island - they called it a natural resource tour - and the villagers spoke about their worries about the environment and resource shortages. There was no commercial logging at that time, the main concerns being worsening water supplies, loss of forest land due to (failed) cash cropping, declining marine resources and commodity prices being too low, which resulted for example in the cocoa plantations involving a lot of hard work for little or no returns, resulting in a lack of cash income. The villagers wanted to harvest their timber themselves but so far had not been able to. The provincial government organised a follow-up meeting in Buala, the provincial capital. In 1992, the situation was reviewed -

³⁰ As in many development projects involving outside agencies, the initial project manager was a European who was working with an Isabel island counterpart, with the intention of handing over management to the Isabel islander after a period of time. This handover occurred after the field work was conducted, in May 1997.

the province had received a number of applications for sawmill licences for community projects, and these were all pending with the Provincial Development Unit (PDU). The PDU in Buala screened all the applications and then they went to the PDU in Honiara who held a pot of money from bilateral donations for provincial development projects.

The province identified issues of training in use of equipment and international market requirements as being crucial to the success of any local schemes and therefore put together a “project package” which included all the different individual schemes and covered aspects such as training and grading. The project was sent to potential bilateral and multilateral donors, with the EU expressing an interest in the second half of 1992. During 1992 a number of communities were talked to about the scheme, and 15 said they were definitely interested, 12 of which had already submitted projects, plus 3 others. The province drew up provincial conservation legislation which addressed the problems raised during the initial tour, namely of water supply, *tabu* areas (protecting forest and marine sites) and land conservation areas. The project was approved by central government in mid 1993 and then the proposal went to Brussels, where it took about a year to approve the funding. The project was due to start in January 1995 but the final agreement was not given until May 1995 and no money was received until November 1995. The first staff were therefore not employed until the end of 1995. The first four groups were identified and went for training at the eco-forestry training unit at Komunuboli, followed by retraining at the end of 1995 and beginning of 1996. According to the project manager, the decision was taken not to aim for independent certification, for example by the FSC, because the levels of timber production and likely selling price did not warrant the costs and bureaucracy associated with such schemes. The aim was therefore to source buyers more directly and the first timber was produced

in February 1996, with a commercial buyer found in New Zealand with the assistance of Greenpeace New Zealand. Interviews with the project manager and counterpart manager in September 1996 indicated that there were a total of seven groups operating within the project. The long time frame for receipt of funding meant that by the time of its inception, the project had lost eight of the original communities who had in the meantime signed deals with commercial timber companies. Although commercial logging was not taking place on Isabel in the early stages of the project's development, by the time it was operational at the end of 1995, large-scale logging was taking place over large parts of the island. The project workers saw the project as offering an alternative to large-scale logging and were keen to promote it on that basis. Although technically a provincial project, local institutional capacity building was an explicit objective. According to the project's 1995-6 annual report, land use plans were devised based on village meetings and separate women's and men's meetings, followed by further village meetings. The involvement and approval of women to the local plans was an explicit requirement of the project (ISFMP, 1996).

The Solomons Western Islands Fair Trade (SWIFT) project in Western and Choiseul Provinces was a fair trade eco-timber project devised by the United Church, the local methodist church, with considerable financial support from overseas development NGOs. The aim was for local producers to produce independently certified eco-timber that could be marketed overseas at a premium, ensuring a fair return to the communities. According to an interview with the project co-ordinator in September 1996, this project was developed explicitly to provide an alternative to local landholders who might otherwise have signed logging rights with large-scale logging interests. The environmental and social problems had been widely witnessed and documented in

Western Province, including increased land disputes and disruption to communities.

According to the key informant, the project's secondary goal was to promote sustainable timber production. SWIFT provided a timber marketing and transport hub for local producers who produced timber according to internationally recognised "eco-timber" standards and had received Forest Stewardship Council (FSC) certification.

Of the three projects described above, the SWIFT project was the most high profile project in terms of international awareness, and was widely promoted as a model of community eco-timber development by environment and development NGOs. As all three projects had only just become operational at the time of field work, their success in economic terms could not be judged. However, there were institutional elements that were of interest in each of them. Whilst the three projects were all independently devised and operated, and each had a different motivating force for its establishment, underlying them all was the objective of ensuring landholders were at the centre of creating local development options to enhance control over their resources. In two cases (CRCD and SWIFT), these local development options were established explicitly to be an alternative to landholders signing timber cutting rights with commercial logging companies. In the third case (ISFMP), although not explicit when the project was first being devised, providing an alternative to commercial logging was seen as an objective once the project was operational. These were all new initiatives, which saw the creation of new local-level institutional arrangements to manage forest resources sustainably based on customary practices and norms, and they explicitly considered issues of social sustainability such as community benefits and gender roles, as well as being environmentally benign. All received outside support, both financially and in terms of capacity building. Figure 5.8 summarises their characteristics.

Figure 5.8 Characteristics of three community level projects in the Solomon Islands

Project	Initiator	Activity	Outside funding and support	Community input to plans	Explicit alternative to large scale logging
CRCDP	Local community/ NGO initiated	Resource management	WWF	Yes, but with input from WWF	Yes
ISFMP	Provincial government initiated	Community eco-timber production	EU tropical forest budget line	Yes, but within overall project objectives	Yes, once operational
SWIFT	Church/Int'l NGO initiated	Community eco-timber production	International NGOs	Yes, but have to operate within international standards (FSC)	Yes

To summarise, there appear to be two motivating factors behind the development of community forest management initiatives in the 1990s. The first was a reactive response to try to address some of the ecological and social problems created by commercial logging in the Solomon Islands; the second was a more proactive desire by communities, the state and international donors to encourage local communities to develop their resources for themselves. Even in the negative forms of resistance, the underlying goal was to protest against communities' loss of *de facto* control over forest resources. The more pro-active initiatives described above had an explicit aim of strengthening communal organisation and control over forest resources. The new institutions had political objectives, seeking to assert control by building on social cohesion inherent in traditional institutions whilst also tackling inequalities such as gender relations regarding natural resource decision-making and use. They therefore aimed to blend traditional institutional norms with contemporary concerns about

environmental protection and sustainable development. They also provided education and training and aimed to offer a fair economic return to landholders for developing their resource sustainably, thus seeking to avoid distributional conflict and to overcome knowledge deficits and associated power imbalances. However, the empirical work did not assess the economic feasibility of these projects and further research would be needed to determine whether these schemes proved viable in the longer term.

5.5 Conclusion

In the Solomon Islands, customary tenure has been the dominant property rights institution. However, the case study reveals how colonialism by the British led to attempts to introduce forest management practices and associated tenure policies adopted from the models imposed in Burma and India. Under these models, concepts of state control of the forest resource to promote private sector development were introduced. Explicit in this was the belief that Solomon Islanders were not able to develop commercial timber operations themselves. However, tasked with finding forests to establish a Permanent Forest Estate, with its implicit assumptions of empty and unproductive forests (“Waste Lands”) and exclusion of other users, the colonial administration largely failed due to the resistance of Solomon Islanders and some sympathetic members of the administration. During this period, there were tensions between land and forestry officials, with the former being more sensitive to the Solomon Islanders’ customary tenure, whereas the latter were more interested in establishing a framework for timber exploitation.

In the 1990s, although customary tenure remained the dominant form of tenure, management of the forest resource was increasingly ceded to the private sector by way

of timber cutting rights for timber exploitation. This introduced an additional layer of rights to forest resources on top of customary tenure, in practice undermining the traditional customary approach and gave considerable power to the private sector, both in terms of negotiating with landholders and in terms of operational control of forest areas. As a result, formal and informal decision-making processes regarding the allocation of the resource were open to abuse by timber companies; they were also often subverted by individuals within communities as well as elected representatives at national and local levels for the promise of personal gain. This in turn undermined existing property rights structures and power relations, creating new rural elites. The changing shareholdings of companies increased the sense of distance between traditional landholders and the new managers of the forest resource, with landholders often not knowing who they were dealing with. Although still the legitimate landholders, community members did not feel in control of the forest resource once logging companies had logging rights to their forest. By analysing the inter-relationships between these social actors, it becomes clear that they were based on unequal power relations, with corporate interests often being the strongest in terms of bargaining power, due to the financial resources at their disposal and the lack of information available to local forest communities. Also, communities often saw the benefits from the resource exploitation accrue either to private companies or to only certain members of the community, creating distributional conflict at a local level.

Notwithstanding these unequal power relations, and the tendency for interactions with the timber industry to have a negative impact on community cohesion and pre-existing institutions, Solomon Islanders continued to find ways to resist these influences, either through non-co-operation with formal procedures or through direct action, and this

mirrors actions in Burma and Indonesia, where even those considered to be the weakest in terms of power still found ways to resist those in power (Bryant, 1997; Peluso, 1992). Attempts were also made to establish community forest management projects, often with the political aim of asserting communal rights through developing community eco-timber schemes and in order to achieve a more fair distribution of the benefits from logging. However, most of these projects required significant technical and financial assistance from external sources.

In conclusion, the establishment of property rights institutions to facilitate the development of the timber industry has followed a complex and contradictory path. Although the state failed to establish a Permanent Forest Estate under its control, leaving customary tenure as the formal property rights institution to land and forests, nevertheless it did mediate rules by which the private sector could enter into direct negotiations with landholders to gain timber cutting rights. Thus, unlike in many countries with a large scale timber sector, Solomon Islanders were able to enter into direct negotiations with timber companies over whether to allow timber cutting in their forests or not. So, local forest communities appeared to have reasonable levels of bargaining power in relation to other bargaining parties. However, a careful analysis of the procedures for negotiation show that asymmetries in power existed on a number of levels, both within communities and between communities and timber companies. These asymmetries were based on lack of knowledge amongst certain members of the community, financial inducements offered by timber company representatives to individuals, or connections to politicians and officials who favour the private sector timber industry. However, Solomon Islanders found ways to assert bargaining power, through resistance and through using community forestry as a means of asserting

control over forest resources. Property rights in the Solomon Islands can therefore be understood as complex political institutions used to negotiate access and control of forest resources over time, with past institutions and decisions resonating on the present. The implications of the findings of the case study in relation to the analytical framework elaborated in Chapter Two are discussed more fully in Chapter Seven, and comparisons are drawn with the British Columbia case study, which is the subject of the next chapter.

Chapter Six

British Columbia Case Study

6.1 Introduction

This chapter examines the evolution of the forest management regime in the Canadian province of British Columbia (BC) and the pressures for changes in property rights institutions in the 1990s. Within the theoretical framework outlined in Chapter Two, the same questions explored in the Solomon Islands case study are investigated in BC: how has the dominant forest management regime evolved? What are the property rights implications of the dominant forest management regime for local forest communities? How do local forest communities and the dominant forest management regime interact? This chapter analyses a number of primary and secondary data sources. Interviews were conducted with key informants in government, NGOs and civil society representatives in January and February 1999, with follow-up emails after that date. Administrative records were also important sources of primary data for the BC case and included archival materials, legal judgements, official and unofficial documents and websites, in particular those of First Nations, industry and environmental groups. Secondary data consulted included published reports, literature and newspaper articles.

After briefly describing forest resources in BC, section 6.2 provides a short introduction to BC society, including relations between First Nations and the provincial government, in order to provide a context for understanding the evolution of forest management in the province. The dominant forest management regime described in Chapters One and Three is epitomised in BC, with the province holding public forests under state control and delegating management of the resource for timber production to the private sector. The evolution of property rights institutions to facilitate this process is described in

section 6.3, including a history of resource development and the structure of the timber regime in the 1990s. Section 6.4 discusses the interactions between local communities and the timber regime, based around the themes of forests as contested domains and negotiating access and control. In section 6.4.3, primary data from one particular region, the Nelson Forest Region, is analysed to investigate in more detail these inter-relationships. The analytical factors identified in Chapter Two that can help explain institutional choice and change, namely distributional conflict, the relative power of bargaining parties, ideology and historical path dependence, guided the analysis and are discussed in more detail in relation to both case studies' findings in Chapter Seven.

6.2 Case study context

British Columbia (BC) is a Province of Canada, situated on the west coast and bordering the United States to the south (see map 6.1). It stretches 1,300 km from south to north and 800 km west to east, covering 930,000 square kilometres. Forests cover 600,000 square kilometres, mainly of coniferous species. BC is world-renowned for its natural beauty, with mountains, forests, lakes and a long coastline combining to spectacular effect. The ecological significance of BC's forests have been well-documented and publicised by ecologists and environmental NGOs. BC contains the world's largest remaining intact tracts of temperate rainforest, which has been identified as one of the most threatened forest types in the world (Bryant et al, 1997). Temperate rainforests are rare ecosystems, covering only about 0.2% of the Earth's land area, one half of which being on the west coast of North America, from Oregon to Alaska.

Map 6.1 British Columbia



Temperate rainforests are biologically rich ecosystems. The main species of conifer in the temperate rainforest are Western Hemlock, Western Red Cedar, Amabilis Fir, Douglas Fir and Sitka Spruce. They can live up to 800 years and grow to heights of 95 metres. This makes the trees of particular interest to the timber industry and BC is the largest softwood producer in Canada. Forests of old-growth trees (trees over 200 years old) provide habitat essential to a rich community of species, many of which are dependent on the natural

ecosystem of an old growth forest for their habitat (Hammond, 1991). The importance of old growth forests compared to secondary or plantation forests are stressed by ecologists and conservationists because of their productivity and performance of vital ecological functions, such as providing nutrients and shelter, regulating water flows and providing rich, deep soils.

In Canada, provincial governments have jurisdiction over the country's forest resources, apart from those forests under federal control for example as National Parks or Indian Reserves. The Government of British Columbia therefore holds 97% the province's forests (also known as Crown forests) under its jurisdiction on behalf of the people of the province and is directly responsible for the management of the resource. BC's parliamentary government has the Premier at the centre of the executive, who appoints members of the cabinet and thus controls provincial policy (Salazar and Alper, 2000). The BC Minister of Forests is the key regulator of forests, appointed by the Premier. Provincial control of the forest resource and the predominance of the production regime have meant that links between the government and the private sector have traditionally been close, with policy formulated through bargaining between these two groups and management of the resource delegated to the private sector (Cashore et al, 2001; Wilson, 1998).

Formerly a British colony, BC retains British-style parliamentary democracy, the provincial government being located in the provincial capital of Victoria, situated in the south of Vancouver Island. The commercial centre and largest city, is Vancouver, situated on the coast of the mainland, very close to the US border. The population of BC is around 4 million in total, of which around 170,000 are aboriginal people. Most of the population is

located in the south west of the province, in Vancouver city and on Vancouver Island.

These were also the first areas to be colonised by settlers.

Because of the high value stands of timber on the one hand and the wilderness value on the other, BC's forest resources have been categorised by a "war in the woods" between those who want to develop the timber resources and those who want to protect the natural forests. This proved an increasingly divisive and public issue in the 1980s and 1990s (see section 6.4 below). However, amidst the wrangling between logging and protection, the claims of First Nations were largely ignored by all parties (Braun, 2002). The vastness of BC, most of which is forested and remote, has meant that the province has widely been conceived as an empty, pristine wilderness to be exploited or protected. This has contributed to the negation of First Nations land claims³¹ and the dominant forest management regime developed with little reference to aboriginal rights or title until litigation and treaty negotiations forced the issue onto the agenda (see section 6.4 below).

The first outsiders to contact the aboriginal peoples of the region were traders and explorers, contact being limited to transient visits. The first commodity to be sought by traders for international markets were the pelts of the sea otter. The traders were reliant on the native peoples to provide them with supplies. The skins fetched high prices, particularly in China. Barman (1991) calculates that during the peak years of 1785 and 1825 over 170 separate ships from several nations traded in the Pacific Northwest. During this period sea otter populations declined rapidly to the point of extinction, as demands of the trade exceeded supplies. Russia, Spain, Britain and later the United States of America all had economic and political interests in the area. It was the British who would

³¹ See Braun (2002) for an analysis of nature/culture ideologies and how scientific forestry and wilderness protection discourses have constituted First Nations as either being absent from forests or as being collapsed into them in idealised and romanticised views.

consolidate their trade and political interests in the region by claiming it as their territory. By the mid 19th century, the Hudson's Bay Company had established settlements for fur trading in the west, the British government granting this privately owned, London-headquartered trading company "the sole and exclusive privilege of trading with the Indians" over all of British North America "not being part of any of our provinces" (cited in Barman 1991: 39). British Columbia was not at this point claimed by any nation as a sovereign territory.

In 1846, the international boundary with the United States was negotiated, the northern part formally becoming British territory but left more or less to the control of the Hudson's Bay Company (HBC). As animals became trapped out, the HBC diversified. It was not until the gold rush, starting in 1858, that the non-native population really began to grow. By the end of 1858, the British government was forced to establish an independent administration in the area, rather than relying on management by the HBC, in order to defend its newly acquired territory from US encroachment. Around the same time, timber was being recognised as a valuable asset and the beginnings of a timber industry began. BC joined the Canadian federation in 1871 and the construction of the railway increased demand for timber (Gillis and Roach, 1986).

The First Nations of British Columbia never ceded or signed treaties giving up rights to their land and resources, apart from 14 treaties that were signed in the 1850s relating to a small portion (about 3%) of Vancouver Island. One of these was later extended to a small area in North Eastern BC (Boyd and Williams-Davidson, 2000). Nevertheless, the state appropriated their land for development. In the 1860s the Lands commissioner prohibited the pre-emption of Crown land by aboriginal people and denied the existence of aboriginal

rights or the need for treaties (BC Treaty Commission, 2002). Aboriginal rights were further eroded with the creation of Indian reserves and the adoption of assimilationist policies such as the removal of children from their families to be placed in residential schools and the outlawing of the potlatch, “the primary social, economic and political expression of some aboriginal cultures” and the prevention of land claims from going to court (BC Treaty Commission, 2003). It was not until 1951 that these laws were repealed and in 1960 aboriginal people gained the right to vote in federal elections (the provincial right to vote was given to aboriginal males in 1949) and the phasing out of residential schools began. In 1991, the BC government recognised the existence of aboriginal rights and in 1992 an independent BC Treaty Commission was established to begin a treaty negotiation process between the federal and provincial governments and First Nations (see section 6.4 below).

6.3 The evolution of forest management in BC

The history of BC’s development since colonisation revolved around resource extraction, in particular forestry, fisheries and mining. Forest management policy was dominated by single resource extraction, namely timber production. How to manage the forest to provide a sustained yield of timber and generate revenues for the province preoccupied the policy makers since the 1900s. BC’s forests are a rich source of quality softwood timber species, described as “green gold” (Marchak, 1983). Timber is the dominant industry in the province, and BC is the largest producer in Canada. Most BC timber is exported, with the main market being the USA, followed by Japan and Europe, earning the province over 1.6 billion Canadian dollars in revenues in 1999. It is the largest industrial employer, providing 90,600 direct jobs and 181,200 indirect jobs in 1999 (COFI, 2000). Despite the increasing awareness of the multiple roles and values of forests, timber production is

still the dominant forest management regime and the following sections describe the history and development of forest management in the province and its structure in the 1990s, in particular in relation to the property rights assumptions of the dominant forest management regime.

6.3.1 Developments up to 1991

A review of the history of forest management in the province is important for understanding how the tenure system in BC's forests evolved and the conflicts that have arisen as a result of forest allocations that favour the commercial timber industry. Up to 1991, four broad phases in policy development can be identified since colonisation in the mid-19th century. Each new phase was signalled by the report of a Royal Commission ordered to study and make recommendations on forestry policy for the province.

The first phase up to 1912 has been characterised as the pioneer days. At the time of the first settlers, the timber of BC was not viewed as a valuable resource (Barman 1991, Gillis and Roach 1986). At that time, because the land was unsurveyed and no money was forthcoming from Britain to carry out such work, land was sold by the Crown to individuals, initially for agricultural purposes. The terms of the sale, apart from other conditions, made the purchaser responsible for the survey of his holding before title was fully transferred (Gillis and Roach 1986). The earliest alienation of land specifically for timber production occurred in 1862, and the first instances were for the provision of timber to highly localised markets (Gillis and Roach 1986). In the 1860s, large, mechanised mills were built around Burrard Inlet, and other locations suitable for

shipping. The timber was given virtually for nothing in large concessions to encourage these developments, regardless of First Nation claims to these lands (Harris, 1997).

However, this system did not last long as it proved unpopular with all parties. Government was losing the right to revenue and industry, which was operating in a transitory way, did not want to be saddled with land once it had been logged out. In 1865 annually renewable leases were introduced, with clauses guaranteeing settlers' pre-emption rights, reflecting the government's preoccupation with agricultural settlement (Gillis and Roach, 1986).

After BC joined the Canadian confederation in 1871, the construction of the trans-continental railway provided increased demand for timber and a shift in location to inland mill sites. The completion of the railway provided access to Canadian markets, particularly the prairies.

During the pioneer period, Crown land was granted outright to railroad and timber companies in order to generate development in the sparsely populated and untouched forests of the province. It was during this period that most of the existing private land was granted, mostly on Vancouver Island. In 1909, a Royal Commission was established under the chief commissioner of lands, Frederick John Fulton, to review the development of the timber industry and to make recommendations on managing and developing the forest resource, and his report laid the groundwork for the second period in forest policy development. The Final Report of the Royal Commission of Inquiry on Timber and Forestry was published in 1910. Amongst its recommendations, the commission stated that no further alienations of timber lands should take place, and unalienated timber lands should remain as Crown Forest Reserves to be developed by the Province. It also established clear support for the generation of provincial revenues from timber and

provincial regulations to ensure “orderly extraction” (Government of the Province of British Columbia, 1910).

The next phase, between 1912 and 1947, was a period when resource development was consolidated along the lines of the colonial forestry model used around the world. 1912 saw the introduction of the first Forest Act, including some of the recommendations of the Royal Commission of 1909-10. The Act established for the first time a system of forest reserves specifically for timber harvesting, being the foundation for the provincial forests, and introduced the timber sales licence, which granted a one-off right to harvest a particular stand of timber. The Act also established a Forest Service to administer the forest reserves.

The government relied on the private sector to develop the resource in exchange for fees, retaining Crown ownership of the resource. Thus, the industry had access to abundant high value timber at relatively little capital cost and the government maintained control and received revenues from the sector. As the industry grew in the 1920s and 1930s, forest policy was primarily concerned with fire suppression, undertaking inventories of the timber resource and collecting revenue, and did not impose any regulations on the rate or methods of harvest, which were left to the discretion of the private companies, and reforestation was not a requirement (Ministry of Forests, 1996). This established the pattern of partnership between government and the private sector regarding the development of the timber resource, with government maintaining control of public forests but delegating operational management to the private sector. By the late 1930s, the provincial chief forester was raising concerns about the booming unregulated industry and the need to manage BC’s forests to ensure future timber supplies. At the same time,

industry was demanding the allocation of more forest land in order to further expand and meet the growing demand for timber (Ministry of Forests, 1996). In response to these two conflicting demands, a second Royal Commission under Gordon Sloan, the chief justice of BC, was convened in 1943 and reported in 1945. Having identified key problems in the way the forest resource was being developed, he urged the introduction of sustained yield management:

“...we must change over from the present system of unmanaged and unregulated liquidation of our forested areas to a planned and regulated policy of forest management, leading eventually to a programme ensuring a sustained yield from all our productive land area” (Government of the Province of British Columbia, 1945:127).

Amongst his recommendations, Sloan advocated new systems of tenure that would permit the operator “to retain possession in perpetuity” of land currently held under temporary licence, in return for operating on a sustained-yield basis. In order to promote sustained-yield practices by the private sector, he recommended the large-scale allocation of Crown timber to private operators.

Following the recommendations of the 1945 Royal Commission, the Forest Act was substantially amended in 1947 in order to introduce a sustained yield policy to the province. There were two key tenets of the new policy. Firstly, the harvest rate was to be regulated for the first time through the introduction of the Allowable Annual Cut (AAC), which was set by the chief forester as the upper limit of wood that could be harvested in any one year. The AAC was based on a formula to calculate the volume of timber that could be harvested without theoretically depleting future timber stocks. Public Sustained Yield Units (PSYUs) were identified, within which the harvest of a specified volume of timber was allowed by a number of operators, through the issuance of the timber sale licence and, introduced in 1967, the timber sale harvesting licence. These licences were

volume-based licences and did not designate the specific area from which the harvest should take place within the PSYU.

Secondly, additional Crown timber was made available to the private sector through the issuance of long-term, exclusive forest management licences (FML) to specific areas of forest in exchange for private sector investment in processing facilities and a commitment to introduce forest management plans. This further reinforced the trend towards the government-private sector partnership in managing the province's resources. The FML system was designed to allocate large areas of forest in perpetuity to large companies in an attempt to encourage sustained yield forest management. The system intrinsically recognised the Crown's inability to manage the resource and therefore sought to establish the conditions to encourage sustainable management by large companies. The allocation process was based on the approval of the minister responsible for forests, with no transparent criteria for acceptance or rejection. This allowed the system to be open to bribery and manipulation by forestry companies wanting access to forests. Indeed, the first Minister of Forests under the Social Credit (SOCRED) government, newly elected in 1952, was imprisoned in 1958 for four years having been found guilty of taking bribes from British Columbia Forest Products (O'Keefe and Macdonald, 1999).

Thus there were now two systems in place, one being the area-based forest management licence and the other being the volume-based timber sales harvesting licence. As a result of the introduction of FMLs, the forest industry in BC became concentrated in the hands of a few large companies, dominated by the BC company MacMillan Bloedel. The sector boomed in this period. The 1950s and 1960s saw further expansion of the industry, particularly into the interior, and improved harvesting and processing methods and new

technologies encouraged the AAC to be continuously increased throughout the period. By the 1970s, as the industry expanded, operations started to take place in environmentally sensitive sites. Control of the sector was concentrated in the hands of relatively few players. The top 10 companies controlled nearly 59% of the province's AAC in 1975, with corporate concentration being even more marked in the coastal areas (Government of the Province of British Columbia, 1976). Two companies, MacMillan Bloedel and BC Forest Products, between them controlled more than 43% of the coastal AAC and 21% of the province wide AAC (Wilson, 1998).

However, in 1972, a significant political shift occurred, with the election of the left-leaning New Democratic Party (NDP) government ending over 20 years of pro-industry SOCRED government. Although not specifically a "green" party, it did have an inherent mistrust of the control of the sector by large corporate interests and its natural constituency was amongst forest workers rather than corporate executives. Although only in power for a little over 3 years, its office marked the start of a long period of gradual change, with the awareness of broad forest management objectives beyond just timber production playing a more central role in debates about forest management. In 1975, a Royal Commission on Forests was established under Peter H Pearse to examine timber rights and forest policy. Its 1976 report explicitly highlighted the historical role of the private sector in the management of the forest resource and stressed the need to look beyond timber production to address broader environmental and social objectives. Pearse noted the importance of tenure arrangements and allocations in determining management outcomes, with tenures aimed at the private sector inevitably reinforcing the single use management of forests for timber production. He also recognised the significance of tenure arrangements not just in

assigning rights but also in providing the instrument for controlling forestry activities and achieving a wide range of other public objectives:

“The forest tenure system is therefore the vital link between the users of the province’s forests and the public landlord which owns them. It determines the pattern of rights and responsibilities and shapes the form and pace of resource development” (Government of the Province of British Columbia, 1976:1).

The Pearse Commission identified a fundamental change in thinking that would be needed to accommodate broad environmental objectives and greater public participation within existing forest management policies. In 1979, the Ministry of Forests Act, Forest Act and Range Act were legislated, incorporating many of the Pearse recommendations. Key features of the new legislation included a change to Ministry of Forests objectives to explicitly consider other resource values as well as timber; the consolidation of PSYUs into 33 Timber Supply Areas (TSAs), each TSA with its own AAC; the streamlining of the tenure system; increased public review; multiple-use planning processes and a new process for determining the AAC (Ministry of Forests, 1996).

Whilst the period between 1976 and 1991 has been categorised as one where broader forest management goals beyond timber production were increasingly recognised through the adoption of Integrated Forest Management discourses (Ministry of Forests, 1996), the reality remained business, namely the timber business, as usual. The 1979 Act overhauled the licensing system, with Timber Supply Areas replacing the smaller PSYUs, and Allowable Annual Cuts (AACs) being introduced for each TSA, allocated via a number of new licence agreements, including forest licences and timber sale licences. Tree Farm Licences replaced Forest Management Licences. Area-based Tree Farm Licences and volume-based Forest Licences remained long-term agreements, but were replacable at shorter periods to allow for updating of contract agreements.

The return to SOCREd governments from 1976 to 1991 ensured a sympathetic administration for timber interests. However, the NDP period in office and the Pearce Commission left their mark in terms of increased awareness amongst the public about forest policy and demands for increased public involvement in decision-making. The growing environmental movement became a force to be taken seriously by industry and government alike, and pressure for wilderness protection from interest groups and the public increased, with a series of flash points arising when logging was scheduled for sensitive areas (Wilson, 1998; Mason, 1992). Government plans to extend the private property-type arrangements of the TFL system in the late 1980s met almost universal public opposition (Cashore et al, 2001) and led to the establishment of a Royal Commission under Sandy Peel in 1989 to examine the forest land base and how it was managed (Government of the Province of British Columbia, 1991). The Commission's report was published in April 1991, just as a newly elected NDP government took office, having received large popular support for its environmental platform. The Commission recommended far-reaching changes to forest management at all levels, to reflect the changing values of society:

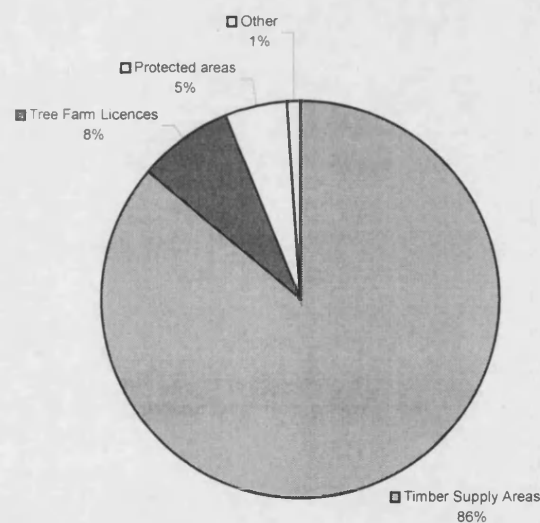
“...the status quo is not good enough. The way the forests and their many values are currently being managed by government and industry is out of step with what the public expects. It must change.” (Government of the Province of British Columbia, 1991:6).

6.3.2 Forest Management in the 1990s

At the beginning of the 1990s, forest property rights and tenure arrangements were virtually unchanged since the 1979 Forest Act. The 1994 Forest, Range & Recreation Resource Analysis (Ministry of Forests, 1996) presented data on all aspects of forestry management, including data on property rights. The 1994 data indicated the two

significant forces in BC's forest management and allocation of forest resources: the provincial government and the private sector (see figure 6.1 below). BC has a total land area of 95,158,000 hectares. Of this, 58,938,000 hectares are classified as forest lands. In 1994, just over 96% of all forest lands in the province (56,921,000 hectares) were controlled by the provincial government, 3% were owned by private interests and less than 1% was under federal government control as National Parks and Indian Reserves (Ministry of Forests, 1996). Of the 56,921,000 hectares of provincial forests, 53,737,000 hectares (94%) were allocated to timber production under tenure arrangements that had changed little since the 1979 Forest Act, see figure 6.1.

Figure 6.1 Provincial forest land allocation, 1994



source: MoF,

source: Ministry of Forests (1996)

The forest management priorities at the beginning of the 1990s were clear: timber production remained the primary objective of forest management, with conservation being a secondary objective. Thus, BC provided a good example of the dominant forest

management regime described in Chapter Three, with government and the private sector effectively controlling the forest resource and decision-making regarding forest management objectives and policies.

In the 1990s, the Ministry of Forests continued to have primary responsibility for the province's forests and was therefore one of the most powerful within government. Its management responsibilities were designated as being for timber, recreation, forage and wilderness, with the primary function being managing the forest for timber production (Ministry of Forests, 1999a; Ministry of Forests, 1998). The ministry employed around 4,550 people, with the headquarters being in the provincial capital of Victoria plus a network of six regions and 40 districts. The six regional offices provided direction and expertise and monitored district activities. District offices were the operational arm of the forest service, "providing service to the public and responding to local needs" (Ministry of Forests, 1999b). The ministry described this as providing a decentralised structure for operational management and local-level decision-making. However, the engine of policy development remained at the headquarters level, where there were four divisions (Forestry, Operations, Forest Industry Projects and Revenue and Corporate Services) plus a Policy and Economics Group. These five areas were divided into 18 branches. The regional and district levels fitted within the Operations Division.

The government's traditional partner in managing the forest resource, the private sector was often able to use its bargaining power to gain outcomes favourable to itself.

Forestry companies controlled most of the forest resource through industrial timber tenures. At the beginning of the 1990s, integrated wood products companies controlled 85% of the AAC in crown forests (Government of the Province of British Columbia,

1991). The concentration of corporate power into the hands of a few big players in the forestry sector was a marked feature of the development of BC forestry since the second world war. For much of this period, the ties between government and industry were close. Leading the private sector stakeholders was MacMillan Bloedel, the longest established, largest and one of the most vociferous corporations in the Province throughout the post-war period³². For much of MacMillan Bloedel's history, the company took a confrontational approach to environmental critics (Braun, 2002; Cashore et al, 2000). The company was instrumental in establishing and financing the Council of Forest Industries (COFI), an influential mouthpiece for the forestry sector in BC (Williston and Keller, 1997). COFI was an industry trade association representing over 100 forestry companies throughout the province, including all of the largest companies such as Canadian Forest Products, MacMillan Bloedel, BC Forest Products and the Slocan Group. It aimed "to create a climate for consistent, healthy economic performance of the BC forest industry", envisioning global competitiveness for the sector (COFI, 2000). The organisation played a significant strategic role in promoting the industry position on high profile issues such as First Nations treaty negotiations, timber supply, forestry regulations and tenure. They mounted a vigorous challenge to the environmental lobby and calls for incremental reductions in the Allowable Annual Cut, the president of COFI claiming that "narrowly focused special interest groups" were calling for changes that would "shrink forestry, kill jobs and destabilize communities" (COFI, 2000: 3). Regarding tenure, COFI consistently advocated private property rights as the most advantageous for producing a globally competitive forestry industry: "This ownership provides forest companies with a stable access to the forest resource and greater autonomy in forest management" (COFI, 1998:43). They stated that private ownership

³² MacMillan Bloedel was taken over by the US timber giant Weyerhaeuser in 1998.

of forests in BC at only 3% was however very low compared to other leading world forest products exporters such as the USA (72%), Sweden (70%), Finland (72%) and New Zealand (21%), and this was seen as a disadvantage to global competitiveness (COFI,1998).

The main tools for allocating forest access and use in the 1990s reflected the predominance of timber production and were a continuation of forest policies that evolved since the post-war period. These continued to be the Allowable Annual Cut and the timber tenure system. The primary objective remained the promotion of timber production in order to generate revenues for the province. The Allowable Annual Cut (AAC) underpinned the forest management regime in BC. It was the annual rate of timber harvesting specified for an area of land by the chief forester, and was determined at least once every five years. The chief forester set AACs for timber supply areas (TSAs) and tree farm licences (TFLs) in accordance with the Forest Act, and these were described as being based on calculations to determine the rate of timber production that may be sustained on the area, taking account of such things as the composition of the forest and expected growth rate; expected time for a forest to become established following clearfelling; expected wastage rates; silvicultural treatments; reasonable constraints on timber production for use of the forest area by other purposes (for example range and recreation); broad provincial economic and social objectives (see the Forest Act Part 2 section 8).

Whereas the AAC was often presented as being based on a neutral calculation of sustained yields of timber, the calculation of the AAC was actually influenced by a number of factors and was in fact a policy tool reflecting broad management objectives,

increasing or decreasing according to political constraints or priorities (Cashore et al, 2001). The AAC was one of the most contested issues within forest management in BC, ranging pro-development forces on the one hand against conservationists on the other: generally, COFI argued for an increased AAC and environmental groups argued for a reduced AAC. Underlying the allocation of the AAC were inherent property rights decisions regarding the distribution of rights to the timber harvest. The allocation was controlled by the state, but the state was subject to advocacy by the various interest groups regarding the level of AAC. If the overall AAC was reduced, the state had to correspondingly reduce the level of harvest that had already been allocated to licensees. If the overall AAC was increased, then more timber cutting rights were available to be assigned. Companies could be penalised not only for exceeding their AAC but also for not harvesting their full allotment of AAC (Ministry of Forests, 1996).

In the 1990s there were various different types of tenure rights to timber in the province, with forests available for timber harvesting covering 94% of the province's forests in Timber Supply Areas (TSAs) and Tree Farm Licences (TFLs). The 33 TSAs were administrative units under the jurisdiction of the BC forest service and each TSA was allocated an AAC. The AAC was then distributed by way of licences to a number of operators, who were licensed to fell a specific volume of timber each year within the TSA. In most TSAs virtually all of the AAC was already apportioned to operators via long-term replaceable licences (Hoberg, 2000).

Volume-based licences, such as the Forest Licence, were non-exclusive rights to AAC within a TSA. In order that licensees did not cut the same area, each licensee submitted annual permits to cut in a specific area for the approval of the district or regional manager

of the Ministry of Forests. Licence holders paid stumpage fees and annual rent to the province and had standard responsibilities elaborated under the Forest Practices Code. Unlike TFL holders, they were not obliged to prepare management plans or inventories (Cortex, 2001).

Tree Farm Licences (TFLs) were the most productive form of tenure in terms of timber extraction, with 24% of AAC coming from 8% of the land base of the province in the year to March 1998 (Ministry of Forests, 1999c). There were in 1999 34 TFLs, held by 19 private companies and 2 district-run institutions. The Tree Farm Licence (TFL) was the tenure agreement with the most private-property right type characteristics. It was an exclusive right to a specific area of land, and although issued for 25 years, was renewable every 5 years, giving security of tenure to the licence holder into the foreseeable future. The TFL could be transferred by the holder, with the provision that they obtain ministerial consent and relinquish 5% of the AAC. TFL holders had rights to exclude the public from forest areas if they might interfere with logging interests. With these rights, the TFL holder had responsibilities to pay stumpage fees and annual rent to the province and had to submit 5 year management plans and prepare an inventory, as well as standard requirements for road-building, operational planning and protection and reforestation as regulated by the Forest Practices Code. If the government decided to set aside some of the land within the TFL, it had to compensate the TFL holder accordingly (Cashore et al, 2001). The TFL system has been blamed for facilitating the concentration of corporate power that was witnessed from the 1950s onwards, with the industry being concentrated into the hands of fewer and larger corporations (Wilson, 1998; Government of the Province of British Columbia, 1976). In 1987 it was proposed to double the amount of land under TFLs in order to stimulate private sector investment. However, due to strong public

opposition, the scheme was eventually dropped (Ministry of Forests, 1996). Figure 6.2 lists the main industrial scale licences³³ in operation in the 1990s and their property rights characteristics.

Figure 6.2 Main types of industrial-scale licences in 1994 and property rights characteristics

Type of Licence	Allocated by	Duration	Area or volume-based	Property rights characteristics
Tree Farm Licence	Minister	25 years, replaceable every 5 years	Area-based	<ul style="list-style-type: none"> • Exclusive rights to harvest timber in a specified area • Transferable (Ministerial consent – 5% of AAC reverts to province)
Forest Licence	Minister	Up to 20 years, replaceable every 5 years	Volume-based AAC in TSA	<ul style="list-style-type: none"> • Transferable (Ministerial consent – 5% of AAC reverts to province)
Timber Sale Licence	Minister	Up to 10 years, replaceable every 10 years	Volume-based AAC in TSA	<ul style="list-style-type: none"> • Transferable • (Ministerial consent – 5% of AAC reverts to province)
Pulpwood Agreement	Minister	25 years	Volume-based	<ul style="list-style-type: none"> • Transferable

Source: Forest Act; Cortex 2001

The private property-type nature of timber tenures operating in BC in the 1990s was borne out by the compensation culture that was accepted by government and industry alike. As

³³ Industrial-scale licences are those that assign rights to large volumes or areas of timber. In addition to these licences, since the 1980s there have been specific programmes designed to be available to small operators, for example as drawn up under the Small Business Forest Enterprise Program, for volumes up to 10,000 cubic metres and the Woodlot Licence, for areas up to 600 hectares. They account for 14% of the AAC (Hoberg, 2000).

discussed in Chapter Two, Bromley (1991) describes the prevalence of compensation culture in the contravention of private property rights, where the latter are seen as a “timeless and immutable entitlement”. This approach underpinned tenure in BC. If the government withdrew any Crown forest land from the timber exploitation stock, government and industry both expected compensation to be paid to the private sector. For example, when in 1987 an agreement was reached between the Canadian and BC governments and the Haida Nation for the creation of the South Moresby protected area, the BC government was only prepared to sign this agreement if C\$37 million were paid by the federal government to two forestry companies, Western Forest Products and MacMillan Bloedel, for the loss of future logging rights to the area’s Crown forests (Parfitt, 1998). Other options would have been to let the licence lapse or take back a portion of the AAC, both of which the Minister of Forests was entitled to do. Critics see examples such as this as government intent to privatise public resources: “That these options weren’t pursued....tends to reinforce the notion...that public resources are being privatised in all but name” (Parfitt, 1998:20). However, others see the flaws in BC forest policy as being not enough privatisation (Drushka, 1993). For Drushka, increased privatisation would increase security of timber access for the forestry industry, thus promoting longer term investment and management of the resource, and could be structured to allow small businesses to enter the sector. Nevertheless, the system in place in the 1990s favoured large businesses, and timber tenures were concentrated in the hands of relatively few, large corporate interests, who controlled 86% of the AAC (Cashore et al, 2001). In summary, the evolution of forest management policies in BC clearly favoured timber production, and property rights institutions were introduced to facilitate corporate control of the forest resource as the most efficient way of developing the timber industry. This meant that the state and the private sector between them held the most power

regarding forest management and control, with little apparent scope for local forest community involvement as bargaining parties able to influence property rights outcomes. Nevertheless, the following section analyses the ways in which local forest communities did try to influence forest policy and management, and attempts to create new property rights institutions.

6.4 Interactions between local forest communities and the timber regime

The predominance of the timber regime, with power over forest control and decision-making resting with the provincial government and private sector, meant that local forest communities had little capacity to influence how forests were managed and allocated. The participation of local forest communities in decision-making and management of the forest resource was rarely encouraged by successive provincial governments, other than through the small business enterprise program and the woodlot licence system, both of which accounted for a small percentage (14%) of overall tenures. However, the 1990s saw the emergence of a new forest politics that promised much in terms of participation. After the relative stability of forest policy in the post war period, with timber production remaining the primary objective of forest management and the private sector controlling and managing most of the province's forests, the 1990s were a period of change in forest management culture, with a new forest politics emerging within a broad shift towards sustainable development objectives and a framework of comprehensive land use planning. The election of the NDP government in 1991 and their subsequent holding of power throughout the 1990s produced an active period in forest policy dialogue, although by the end of the decade little had actually changed regarding forest tenure (Cashore et al, 2001). The NDP government was elected largely on its platform of environmental and forest reformist promises. These appealed to a populace whose

awareness of environmental issues, and issues surrounding the protection of old-growth forests in particular, had been heightened by the increasingly sophisticated and media-savvy environmental movement in the province (Wilson, 1998; Mason, 1992). In its manifesto, the NDP promised to double the amount of provincial land under protected area status, to 12%. It also promised to reform existing forest policy to specifically protect old-growth forest:

"What we need to see is a logical, technical approach to identifying and preserving old growth stands for future generations instead of just waiting around for the axe to fall on them" (NDP, 1989).

Thus, shifting ideology regarding forests and growing acceptance of conservation at the political level meant that a broader range of interest groups were starting to have some influence on the direction of forest policy, rather than the dominance of industry and government that had characterised previous decades. The following paragraphs discuss the interactions between local forest communities and the dominant forest management regime, in particular attempts by local forest communities to challenge the status quo forest management and tenure assumptions of the dominant forest management regime, in which the state and private sector were the most powerful actors.

This section examines the pressure for change to the forest management regime in the 1990s by focusing on two processes that, although in evidence prior to the 1990s, played a more high profile role in that decade. First, there was popular resistance to commercial logging, frequently called the "war in the woods", between logging and wilderness protection forces that reached its most extreme confrontation in Clayoquot Sound on Vancouver Island in the early 1990s. Second, there were the calls for increased community involvement in forest policy decision-making and control of the forest resource itself, which by the end of the decade manifested itself in treaty and

rights negotiations between First Nations and provincial and federal governments on the one hand and the limited introduction of community forest tenures on the other.

6.4.1 Resistance to commercial logging

With the increasing public awareness of environmental issues since the 1970s and the growing strength of the BC environmental movement, attention broadened in the province to focus on multiple values of forests, in particular biodiversity and scenic values. The key environmental debate revolved around the protection of old-growth forests, the conflict being characterised as between logging versus wilderness protection (Wilson, 1998).

Tourism became an important industry in the province, with hiking, canoeing and ski-ing being particularly popular activities. Apart from aesthetic and recreation values becoming increasingly important, the protection of forests was also promoted in terms of their hydrological regulation functions, with many rural communities depending directly on watersheds for their domestic water supply, and wild salmon-spawning streams and rivers being vital to the fishing industry. The scale of forest lands in BC masked the fact that old growth forest areas were increasingly logged out over the decades, in particular accessible coastal old growth such as is found on Vancouver Island.³⁴ This led to the emergence of a strong and highly vocal environmental movement which grew in strength from the 1970s to demand the cessation of logging in old growth forests and to advocate an increase in the amount of wilderness areas, particularly forests, that were protected. Given the dominance of the timber industry in BC's political and economic realms and the high profile wilderness protection supporters, the relationships between those advocating

³⁴ The liquidation of natural forests, particularly in the coastal areas, has been of concern to experts for decades, and is raised in the Sloan, Pearse and Peel Royal Commissions (Government of the province of British Columbia, 1947, 1976 and 1991). However, the fundamental trend, known as "falldown", was masked by the opening up of new forest areas to exploitation, particularly in the interior of the province.

environmental protection on the one hand, and those representing economic interests on the other, were characterised by their adversarial nature (Wilson, 1998; Mason, 1992). Popular protest against the dominant paradigm of industrial forestry began in the 1970s and a series of flash points occurred as protests erupted in one valley or watershed after another as the industry moved into previously unlogged areas³⁵. The conflicts have commonly been labelled “the war in the woods”, a phrase that became short-hand for the often acrimonious disputes and front-line nature of battles that took the form of blockades and other mass direct action focused against industrial forestry, and clearcut logging in particular³⁶.

By the 1990s, calls for increased wilderness protection were becoming louder, largely as a result of the increasingly sophisticated environmental movement that had been developing its skills over the previous decade or so. Popular support for protecting the environment was also high, and the NDP were elected on an explicitly pro-environment agenda of protecting old-growth forests and developing new harvest methods. However, despite the promising words of the NDP government, within two years of coming to office they were to be faced with one of the world’s largest environmental protests, at Clayoquot Sound on Vancouver Island. Clayoquot Sound, on the West coast of Vancouver Island, became the largest and most famous case of mass civil disobedience in Canada’s history, bringing the campaign to protect BC’s old-growth forests to an international audience. Clayoquot Sound can be seen as the high water mark in grass roots activism in the

³⁵ For example, Meares Island, Stein Valley, Carmanagh Valley and South Moresby were all scenes of environmental protest.

³⁶ Clearcut logging has been the primary harvesting method in the province. It involves the removal of all vegetation over large areas and has a very high negative visual impact.

province, galvanising thousands of protestors to blockade roads and undertake acts of civil disobedience to prevent logging in the area.

Despite widespread calls for the whole area to be protected, a management plan for Clayoquot Sound was published in April 1993 that scheduled logging in all but 26% of the Sound's old-growth forests, even though around 24% had already been logged. This caused consternation, not just amongst environmentalists but also amongst academics and others critical of status quo forest management:

"The New Democrat Party decision to log Clayoquot Sound appears to be a short-sighted decision...examined in the context of the whole Island the plan is a mistake because the rest of the land has already been logged or altered by logging" (Dearden, 1993).

After the announcement of the plan in April 1993, more than 12,000 people took part in protests in Clayoquot Sound itself, blockading roads to prevent logging operations and 932 people were arrested for civil disobedience (MacIsaac and Champagne, 1994). The focus of their protest was to prevent MacMillan Bloedel, the company with timber cutting rights to the majority of the available forests in the Sound, from continued logging of the area. Protests also took place across Canada, the USA, Europe and Australia. Information, publicity and awareness-raising activities became a major advocacy tool for the protagonists. The protests generated massive publicity, not just within the province but nationally and internationally, gaining widespread support amongst the public. The government tried to argue that its plans were different to previous ones, producing a leaflet that was delivered to every BC home:

"There is no doubt that large-scale clearcutting and poor road construction have extensively damaged streams, soil conditions and wildlife habitat. Previous governments cut back forest monitoring, allowing logging companies to police themselves with only occasional visits and audits by Ministry of Forests staff. That era of "sympathetic administration" is over. This government is introducing new standards that will stop such logging practices from ever occurring again in Clayoquot Sound" (leaflet published by Ministry of Forests, 1993).

Environmental activists, whose experience, networking and strategic acumen had evolved over the past few years to become a formidable force (Mason, 1992), produced evidence of significant environmental degradation caused by clearcut logging in the Sound. Following a freedom of information inquiry by environmental groups, it was uncovered that a recent government audit of MacMillan Bloedel's logging practices found that more than 75% of the sites examined were in violation of government fisheries and forestry guidelines. On August 6th 1993, the Ministry of Forests wrote to MacMillan Bloedel, cataloguing specific incidents of non-compliance with the Coastal Fish Forestry Guidelines (CFFG) in Clayoquot Sound. The August 6th letter from the resource officer responsible for the area made the following points:

"..in some cases the severity of events of non-compliance with the CFFG is not clearly expressed in the AAP [Annual Assessment Plan]...Generally, Section 2.6 (post operational) of the 1988 CFFG has had a low level of compliance... Road construction has been identified as an area of non-compliance...Road maintenance is an area of non-compliance...The stream management of Class III and IV creeks is a major area of non-compliance..." (Fisherman, 1993).

Overall, 21 of the 27 cut blocks audited failed to meet with Federal fish-forestry guidelines and Ministry approval. MacMillan Bloedel was found to not be maintaining forest site productivity after logging by stabilising slopes or minimising stream impacts. The Annual Assessment Plans and the audit revealed extensive landslides and soil erosion in the majority of cut blocks. The company was also found to have deliberately misrepresented classifications of salmon streams, falsely claiming they were devoid of fish in order to avoid additional costs of safeguarding habitat.

Environmental groups used the international attention focused on Clayoquot Sound to lobby for boycotts of BC timber by international markets, with some success in Europe. The pressure on government to satisfactorily settle the Clayoquot Sound issue was

immense and in 1993 established the independent Clayoquot Sound scientific panel which was charged with making recommendations on how logging should occur in the area. The panel finally reported in 1995 and the government accepted all of its 128 recommendations, including the cessation of clearcut logging in the area. Whilst First Nations were marginalized during initial protests at Clayoquot Sound³⁷, the formation of strategic alliances with local protestors and environmental groups proved to be of mutual benefit in increasing the bargaining power of all the protesting parties. As a result, the Nuuchah-Nulth First Nations became increasingly prominent in the course of resolving conflict and were instrumental in implementing the subsequent settlement. An Interim Measures Agreement (IMA) was signed between the government and Nuuchah-Nulth in 1994, giving greater control over land use decisions and a power of veto to the First Nations in the area. The IMA led to the establishment of the Clayoquot Sound Central Regional Board, the first significant joint management structure between First Nations and the provincial government. In addition, in 1997 a joint venture company was established between representatives of the Nuuchah-Nulth and MacMillan Bloedel to co-manage the forest resources falling within traditional territories and the company's TFL 44 (SILVA, 1998).

In summary, the pressure on the provincial government to engage with concerns regarding protection of old growth forests was enormous during the 1990s. The Clayoquot Sound issue brought international attention to the "war in the woods" that was being waged across the province. Battle lines moved from one hot spot to the next as logging plans were announced in politically sensitive areas. The level of expertise amongst activists had been increasing since the 1980s and strategic alliances were formed between environmental

³⁷ See Braun (2002) for a detailed account of Clayoquot Sound's First Nations and their relations with government, industry and protest groups.

activists, First Nations groups, unions and conservation-minded scientists that strengthened the calls for change in the status quo.

6.4.2 Communities: negotiating access and control

As seen in Clayoquot Sound, protests against the prevailing forest management regime did not just focus on increased protected areas and wilderness preservation. There were also increasing calls for the involvement of local forest communities in forest management, the underlying message being that such involvement would result in more environmentally sustainable forest management. The role of the Silva Forest Foundation, an independent forest management organisation, in articulating ecosystem-based forest management planning was influential in providing a scientific framework for these goals and, most importantly, for providing a link between protecting old growth forests and sustainable community development in a “win-win” scenario. At the heart of the ecosystem-based management model espoused by the Silva Forest Foundation (SFF) was protection, with the first step being to identify what should be set aside in a landscape unit in order to protect the full range of environmental goods and services. From this foundation, an assessment was then made of the feasibility of developing diverse, ecologically sustainable, community-based economies, one component of which was to assess how much timber could be harvested on an ecologically sustainable basis. Whilst the SFF model was widely championed by community activists, the approach itself was not necessarily tied to community control and could be adopted by government and the private sector as well.³⁸

³⁸ Interview with SFF director, February 1999. The interviewee also made the point that communities were capable of mismanaging resources.

In order to defuse the war in the woods, the NDP government embraced the language of consensus, with concepts of democratic legitimacy and participatory decision-making being applied on a systematic basis to land-use decision-making for the first time in the province (Burrows, 2000; Mason, 1996). These concepts were mediated through several processes, including their most comprehensive manifestations through the Commission on Resources and Environment (CORE) and Treaty Negotiation processes (see below). These represented steps towards an inclusive approach to land use planning, mirrored by a shifting emphasis within the forest policy arena to include civil society in dialogue. This inevitably led to high expectations that fundamental change in forest management could take place, expectations that by the end of the decade were by and large dashed (Cashore et al, 2001).

How did all of this pressure manifest itself in specific calls to action? The discourse moved increasingly beyond wilderness protection as the over-arching message and became one of demands for community involvement, both aboriginal and non-aboriginal, in decision-making and community control over forests. Whilst this may have been an expedient way to bring the disparate forces against the status quo together behind a unified message in some instances, it also offered a genuine path of compromise and fertile ground for negotiation with the advocates of the status quo. The argument evolved beyond the simple “jobs” versus “environment” dichotomy that the industry representatives liked to portray and introduced far more complex and genuinely challenging concepts based on fundamentally rethinking status quo property rights institutions in the province.

By the mid-1990s, a number of communities were actively developing initiatives to have a greater say in how the forests in which they lived were managed. Figure 6.3 identifies

those communities who were engaged in such developments by 1998. The communities were in various stages of development, from initial planning to operation.

Figure 6.3 Community forest management initiatives in planning or operation in 1998

Community association	Stage of development in 1998
Central Coast Economic Development Commission (CCEDC)	Planning
Clayoquot Sound Central Region Board	Joint management agreement between provincial government and First Nation
Cortes Island Community Forest Committee	Planning
Cowichan Lake Community Forest Cooperative	Forest Licence
Creston Community Forest	Forest Licence
Denman Island Community Forest	Planning
Forests for the World	Planning
Galiano Conservancy Association	Planning
Gitxsan Nation	Planning/Treaty/rights negotiations
Haida Nation	Planning/Treaty/rights negotiations
Harrop-Procter Watershed Protection Society	Planning
Islands Community Stability Initiative	Planning/Treaty/rights negotiations
Kaslo Community Forest	Forest Licence
Klahoose First Nation	Treaty/rights negotiations; Woodlot Licence
Malcolm Island Community Forest	Planning
Mission Municipal Forest	TFL
Nootka Economic Development Corporation	Forest Licence
North Cowichan Municipal Forest	Municipal Forest
North Island Woodlot Association, Comox Valley	Planning
Omineca Community Forest Ltd.	Planning
Revelstoke Community Forest Corporation	TFL
Robson Valley	Planning
Slocan Valley Watershed Alliance	Planning
Sto:lo Nation	Planning
Tanizul Timber Ltd.	TFL
West Chilcotin Community Resource Association	Planning
Office of the Wet'suwet'en Hereditary Chiefs	Planning/Treaty/rights negotiations
Municipality of Whistler	Planning
Xaxli'p First Nation	Private land
Yalakom Community Council	Planning

Source: Denman Community Forest Co-op, 1998; Silva Forest Foundation, 1998

Although the community associations listed in figure 6.3 were all actively calling for greater control and were drawing up community management plans, in fact opportunities for them to implement these plans or gain control of local forest resources were limited due to the legal framework of the dominant forest management regime. Those who were operating were doing so under existing tenure arrangements, either on private land or as a standard forest licence or, in the case of Clayoquot Sound, as a formal joint management agreement. The groups at the planning stage were either exploring options to establish community forest tenures or were actively calling for such opportunities, including under treaty negotiations and aboriginal rights and title claims. They were engaged in planning round tables taking place throughout the province or were developing plans based on traditional land claims and local economic factors. Two new initiatives in the 1990s did provide a means to achieve greater community control, the Treaty Negotiation Process for resolving First Nations land claims and the introduction of a new form of forest tenure, the community forest pilot agreement. These are described below.

As treaties had largely not been negotiated with First Nations at the time of colonisation, ownership of most of the province in effect remained unsettled, with aboriginal title and rights being claimed by First Nations, although the provincial government had long maintained that such rights and title were extinguished (Ministry of Forests, 1996). In 1993, the provincial and federal governments of BC and Canada and the First Nations established a treaty negotiation process. Up to this point, the provincial government had insisted that it was the federal government that held the responsibility to deal with First Nations' claims and that at most all the BC government had been prepared to do was provide "assistance" (Smith, 1996).

Aboriginal rights to forests are distinct from Aboriginal title to land, and both were being pursued by First Nations, either through negotiation or litigation (Boyd and Williams-Davidson, 2000). Aboriginal rights claims encompass two distinct rights: traditional usufructuary rights and commercial rights. Aboriginal title was elaborated in the *Delgamuukw* decision of the Supreme Court of Canada in December 1997, whereby Aboriginal title was a legal interest in the land, including minerals and forests. According to this decision, Aboriginal title contained key concepts that made it distinct from private property rights: the land is communally owned; the land can only be sold to the Federal government; the land must be managed and used sustainably so that the rights of future generations to the land and resources are not impaired (Boyd and Williams-Davidson, 2000). It distinguished between aboriginal title and aboriginal rights by stating: "... aboriginal title encompasses within it a right to choose to what ends a piece of land can be put. The aboriginal right to fish for food, by contrast, does not contain within it the same discretionary component."³⁹ Aboriginal rights to certain resources, such as fish or trees for cultural purposes, could exist on land that was not subject to aboriginal title. The challenge to First Nations after the *Delgamuukw* decision was to prove title to land, which the *Delgamuukw* case itself failed to do (Lordon, 1998).

Negotiated outside the treaty negotiation process, the Nisga'a Final Agreement was reached in 1998, which transferred ownership of 200,000 hectares of land from the provincial government to the Nisga'a, a relatively small proportion of the traditional Nisga'a territory originally claimed by the Nisga'a of 2.4 million hectares. The treaty allowed the Nisga'a people to "govern themselves in a way comparable to a municipal government"; they owned the forest and mineral resources on their land; they were subject to the federal and provincial laws relating to all British Columbians

³⁹ Supreme Court of Canada, 1997, *Delgamuukw* decision para 168

(Government of the province of British Columbia, 1998). However, this agreement did have significant limitations on the way the Nisga'a could manage and use the forest resource. The Nisga'a were given logging rights to the area, but had to extract not less than the volumes set down under the terms of the BC Forest Practices Code for Crown land for the first five years (165,000 cubic metres annually), followed by a gradual annual reduction down to 130,000 cubic metres. This was despite the fact that the Annual Allowable Cut for the Nass Timber Supply Area (in which the Nisga'a territory lies) was roughly three times the government's own estimates of the long-term sustainable harvest level (Boyd and Williams- Davidson, 2000). Thus, regardless of how the Nisga'a may have wanted to manage the forest resource, they were obliged to extract timber at a rate set by the provincial government for the first nine years.

The Treaty Negotiation process itself had not been successful in concluding any treaties by the end of the 1990s, although over 50 negotiating tables were in existence. Neither had litigation proved any more conclusive, failing to rule in favour of specific claims to aboriginal title, for example in the *Delgamuukw* case. There appeared to be a lack of consensus about the aims of the treaty negotiation process between the government and industry on the one hand and the First Nations on the other. The government approach to treaty negotiations was that they were designed to achieve certainty in land tenure by moving from undefined aboriginal rights to defined treaty rights in order to have certainty over who owned what in the Province. According to the provincial government, "all treaty settlements in total will not exceed a land base of five per cent of the province – which is roughly proportional to BC's aboriginal population" (Government of the Province of British Columbia, 1998). However, for First Nations the purpose of treaty negotiations was to share power with the Crown as equal, co-existing partners on a government to government basis rather than through one-off final settlements: "For them, certainty will be

achieved through renewable, ongoing agreements between mutually recognised partners, not through a final and definitive settlement” (BC Treaty Commission, 2000). This co-management approach, where there is shared jurisdiction of Crown land, was considered impractical and unworkable not only by the government but also by the forest industry association COFI, with their members believing that such joint tenure would increase confusion and conflict: “COFI considers that effective and efficient administration of Crown lands can only be achieved where the Crown holds unequivocal authority and singular jurisdiction over public lands” (COFI, 2001:6). For COFI, the uncertainty surrounding First Nation land claims undermined the investment climate and hindered resource development in the province. According to Smith (1996), the First Nations who had filed their intent to negotiate treaties claimed in total 111% of the province (due to overlapping claims), including Vancouver itself. Thus, there was a very large gulf between First Nation claims and provincial government intentions regarding actual land available for settlements. In terms of tenure, on the one hand, the province maintained its sovereignty over Crown lands whilst on the other First Nations asserted aboriginal title to their traditional lands.

Outside the Treaty Negotiation process, the ongoing management and allocation of Crown forests produced conflict at a local level between First Nations on the one hand and government and industry on the other. There remained disagreement over what constituted consultation. The Haida nation of Haida Gwaii for example claimed that the Ministry of Forests and MacMillan Bloedel had not engaged in good faith consultation regarding the approval of cutting permits: “They ask for input and they do whatever they want. Meaningful consultation would be where our interests are taken into consideration”⁴⁰. By contrast, critics claimed that consultation did not equate to joint decision-making and that

⁴⁰ Kim Davidson, chief councillor of Old Masset, cited in Lordon, 1998:21.

by entering into such relationships governments “have abdicated their obligation to govern” (Smith, 1996:101). In a subsequent ruling by the BC Court of Appeal in a case brought by the Haida nation against the Ministry of Forests and MacMillan Bloedel (later acquired by Weyerhaeuser corporation), the judge asserted that the state and the company had a legal duty to consult and try to reach agreement with First Nations over timber cutting, even though aboriginal title and rights had not been established:

“I would grant a declaration to the petitioners that the Crown Provincial and Weyerhaeuser have now, and had in 1999 and 2000, and earlier, a legally enforceable duty to the Haida people to consult with them in good faith **and to endeavour to seek workable accommodations** between the aboriginal interests of the Haida people, on the one hand, and the short term and long term objectives of the Crown and Weyerhaeuser to manage T.F.L. 39 and Block 6 in accordance with the public interest, both aboriginal and non-aboriginal, on the other hand”⁴¹ (emphasis added).

This case is interesting in the light of the earlier Clayoquot Sound resolution, because it involved the same company (MacMillan Bloedel, later Weyerhaeuser), First Nations and the provincial government as bargaining parties. As described above, the Clayoquot Sound outcome centred around a unique joint management agreement between First Nations and the provincial government which resulted in the Nuu-Chah-Nulth having the power of veto over developments and involving First Nations in commercial forestry activities through the joint venture company with MacMillan Bloedel (later Weyerhaeuser). MacMillan Bloedel accepted this model, even though it restricted their operations, both in terms of location and methods. However, it seems clear from the later Haida case that the Clayoquot outcome had not changed the prevailing ideology of the state or private sector regarding their powers to decide forest policy and manage forestry operations to the exclusion of First Nations. The case also highlights the unique legal position of First

⁴¹ BC Court of Appeal, *Haida Nation v. British Columbia (Minister of Forests)*, para 60, February 27, 2002

Nations, in that the ruling established that consultation should include efforts to reach workable accommodations with them. This contrasts with legal rulings regarding the Slocan Valley, described in section 6.4.3, where consultation was legally deemed to not include participation in decision-making or any obligation on the part of the state to negotiate outcomes. These empirical data support North's (1990) theoretical point that institutional constraints, such as status quo power relations, make large-scale institutional change unlikely, with change more likely in an incremental and marginal way. There was one more development that, together with the Nisga'a Treaty and Clayoquot Sound joint management agreement, represented the only tenure changes in BC to favour community control in the 1990s.

As indicated in figure 6.3 above, First Nations were not the only communities wanting to gain control over forest resources. Calls for community-based tenures achieved enough momentum that the provincial government eventually paved the way for their limited development. In 1997, the then Forests Minister David Zirnelt announced that the provincial government was going to provide new opportunities for communities and First Nations to participate directly in forest management through the establishment of new community forest tenures that would be piloted on a limited scale after an independent advisory committee had made recommendations for the terms of reference for the programme (Ministry of Forests, 1997). The Forest Act was amended in 1998 to include provision for a new form of tenure known as a Community Forest Agreement. Prior to this date, there was no legal basis for a community tenure, although a few communities had been involved in managing forest resources through the standard forest licences: for example, the municipalities of Mission and Revelstoke held Tree Farm Licences. The aim of the pilot project was to test the new tenure and "to provide

opportunities at the community level to test some new and innovative forest management models...”(Ministry of Forests, 1999d). A sub-committee of the Community Forest Advisory Committee evaluated the proposals and ranked them, providing the ministry with a short-list of the best candidates. The ministry then made the final selection. It was initially anticipated by the ministry that three pilots would be selected. However, of the original 27 applicants, 10 were invited to participate in the scheme (Ministry of Forests, 2001), although only six signed final agreements. In 2002, Cheslatta First Nation were also issued a CFPA, bringing the total to seven. See figure 6.4 for details of the seven community forest pilot agreements issued.

Figure 6.4: Community Forest Pilot Agreements Issued as at 31 January 2003

CFPA holder	Area (hectares)	AAC (m3)
Bamfield Huu-ay-aht Community Forest Society	418	1,000
Burns Lake Community Forest Corporation	23,325	53,677
Cheslatta First Nation	39,129	210,000
District of Fort St James	3,582	8,290
Esketemc First Nation	25,000	17,000
Harrop-Procter Watershed Protection Co-op	10,860	2,603
Village of McBride	60,860	50,000
Total	163,174	342,570

Source: Ministry of Forests, 2003

Whilst the Community Forest Pilot Program represented an innovative step towards establishing both the concept and practice of community tenure in BC, nonetheless the operations were regulated by the standard forestry regulations and laws of the Province and therefore had to include timber production as at least part of their business objectives. The tenures were initially short-term, the pilot tenure being for 5 years, during which it would be evaluated and if deemed successful, long-term community forest agreements could be offered by the ministry of between 25 and 99 years, although the specifics for the

longer tenures were not formalised. No crown land was taken out of existing licence agreements to be made available for these new tenures, and so applicants had to identify unallocated Crown forest land and spare AAC as part of their application. According to a ministry source interviewed in 1999, the Community Forest Pilot Program was seen by some in government as an opportunity to access timber production in previously politically difficult areas where opposition from local communities had been strong enough to prevent industrial logging (for example, see the Harrop-Procter case in 6.4.3 below).

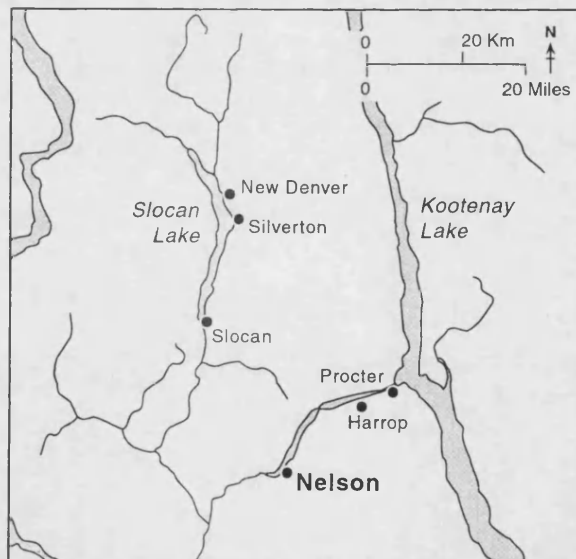
In conclusion, the discourse of who should manage the forest resources of BC was heightened in the 1990s. There were ideological shifts that led to the acceptance in principle of community inclusion, although in practice the status quo proved resistant to large-scale changes. Nevertheless, there were increased opportunities for communities to negotiate access to and control of forest resources, both through First Nations litigation and treaty negotiation processes and through the emergence of new tenure arrangements available to all communities. Nevertheless, by the end of the decade only 393,000 hectares of the Province's 59 million hectares of forests (0.61%) had changed tenure to be brought under community control and even this was subject to Ministry of Forests objectives and regulations. In the next section, the processes and constraints are examined in more detail in one particular forest region in order to analyse how property rights issues were central to forest management debates in the province.

6.4.3 Nelson forest region

In this section, issues raised by a comprehensive property rights analysis are studied in the context of one forest region visited in 1999, in order to look in depth at themes of

distributive conflict, the relative power of bargaining parties and different ideologies regarding forest management and control. The Nelson Forest Region was subdivided into 6 Forest Districts. As with the pattern throughout the province, timber cutting rights over most of the Region were concentrated in the hands of relatively few corporations. Nelson Forest Region had 7 Timber Supply Areas and 6 TFLs, with 24 Forest Licences and the 6 TFLs together accounting for over 80% of the volume of committed rights to cut timber in the region (Ministry of Forests, 1999c). The Nelson Forest Region offers two examples of local community tenacity in trying to gain control over the management of local forest resources. Both cases demonstrate the frustrations and conflicts faced by communities and how the analytical factors described in Chapter Two influenced the different institutional outcomes in each of the areas. The two locations chosen were the Slocan Valley and Harrop-Procter (see map 6.2).

Map 6.2 Slocan Valley and Harrop Procter



Water protection was a significant issue in the region, with many residents relying directly on watersheds for domestic water sources. The potential threats posed to water

quality and quantity by industrial logging activities led to community activism in both locations. Neither the Slocan Valley nor the Harrop-Procter areas had a strong First Nations presence, and the Sinixt Nation of the Arrow Lakes area had been declared extinct by the BC government and therefore were not recognised as a Nation. Nevertheless, representatives of the Sinixt Nation were actively reclaiming their traditions and worked with community groups who included them in issues of relevance.

An area of high scenic value, the Slocan Valley is situated in a remote area in the Nelson Forest Region in South East BC. The valley had around 2,000 residents spread over a number of small communities. Industrial forestry licences applied to most of the Crown forest land in the area. Local opposition to industrial forestry had been evident in the area for decades. Members of the local communities opposed to large-scale clearcutting commissioned the Slocan Valley Community Forest Management Project in 1974, which was a feasibility study to examine how greater autonomy to the local community regarding decision-making and control of local forest resources based on integrated forest management policies would result in more sustainable local economies and preservation of environmental goods and services, including explicitly recognising the aesthetic, recreational and other non-timber values associated with the area, as well as the development of less wasteful, value-added timber businesses. One of its principal recommendations was that local people should be involved in resource policy decision-making processes for the valley, something that they claimed rarely happened. Their rationale for this was that: “We feel that the people who live in the area most directly affected by resource management and utilization policies need to share in their determination and implementation” (Slocan Valley Community Forest Management

Project, 1976:5-1). This project articulated local involvement in integrated forest management policies as a “win-win” scenario for the environment and the local economy: “good ecology is good economics” (Slocan Valley Community Forest Management Project, 1976:xi). Although the document found little acceptance at official levels, this marked the start of activists’ calls for local involvement in decision-making regarding forest resources and the document helped to mobilise community members who were concerned about water quality and environmental protection issues in the Valley.

In 1981, the Slocan Valley Watershed Alliance (SVWA) was formed. This was a coalition of community activists trying to build consensus within communities around watershed protection, the risks posed by industrial logging to water quality and soil stability, and the concept of ecosystem based management planning for the Valley. The Slocan Valley Watershed Alliance represented 10 watershed groups⁴² in the Slocan Valley and its main goal was: “the protection of water quantity, quality and timing of flow in the watersheds of the Slocan Valley”; other goals were ecosystem-based planning for the valley; promoting value-added timber and diversifying the local economy (Slocan Valley Watershed Alliance, 1999). Alliance activities included organising workshops, establishing a community water monitoring programme, lobbying government, commissioning independent experts’ reports of the hydrology of the area and participation in planning processes. Whilst the alliance participated in major stakeholder forums that took place in the 1980s and 1990s, frustration grew in the 1990s as participants felt that the communities’ needs and aspirations were being ignored by government and industry and that whilst they were taking part in good faith in public consultation processes their views

⁴² Hills Water Users Association; Goat Mountain Water Users Association; Harris Creek Water Users; Village of Silverton; Red Mountain Residents Association; Slocan Ridge Watershed Committee; Elliott-Anderson-Christian-Trozzo Watershed Committee; Perry Ridge Water Users Association; Passmore Water Users; South Slocan Commission of Management.

were not being listened to⁴³. Lobbying by environmental groups for increased environmental protection in the area contributed to the creation of the Valhalla Provincial Park and other protected areas. However, in the 1990s, opposition to industrial forestry continued apace. In 1991, there were 83 arrests during a blockade to prevent logging in Hasty Creek, at the time the largest civil disobedience action in the province.

The SVWA worked with the Silva Forest Foundation to develop an ecosystem-based plan for the Valley (Silva Forest Foundation, 1996). SVWA and its constituent groups used the ecosystem-based plan to build support in the communities as a “win-win” option to bring together pro- and anti- logging residents. According to interviewees, there were some splits in the community between those who supported logging and those who supported full protection for the valley. This was borne out by a telephone poll conducted by the Angus Reid Group of Vancouver amongst 400 (out of a total of around 2000) randomly selected permanent residents in August 1996 (Angus Reid Group, 1996). The poll found that 48% of respondents either moderately or strongly opposed government/industry forestry plans in the Valley whereas 36% moderately or strongly supported them. The poll found that moderate or strong support for an ecosystem-based plan increased to about 75%, showing this to be a potentially consensus-building tool within communities. The interviewers sought the interviewees’ attitudes towards various key concepts of the Silva Forest Foundation Plan, with the majority of residents considering water protection to be the number one priority, with 97% of respondents citing this as important, see figure 6.5.

⁴³ Interview with Perry Ridge Water Users member, February 1999

Figure 6.5 Slocan Valley residents' support for statements based on the Silva Forest Foundation Plan

All logging plans should be sensitive to maintaining high quality of water and protecting watersheds	97%
Responsible forest use means that all human uses must first respect ecological limits	93%
Forest restoration needs to be done to correct damage caused by logging practices	92%
A strong economy and a stable community depends on a healthy ecosystem	90%
A diverse local economy is desirable	90%
Adding value to wood products before they leave the valley means that we can cut less timber and employ the same number of people	81%
The forest of the Slocan Valley should be planned and managed by the local community	79%
The Slocan Valley economy is diversifying and many new businesses rely on maintaining the high quality of the environment	78%
Current rates of logging cannot be sustained and, if continued, will soon result in wood shortages and few people employed in the timber industry	72%

Source: Angus Reid Group (1996)

SVWA lobbied the Minister of Forests for the implementation of the ecosystem-based plan for the Valley and for negotiations to end conflict in the Valley, with little success. From October 1996 to May 1997 a series of correspondence between SVWA, the Silva Forest Foundation and the Minister indicated the gulf between the parties over the feasibility and application of the Silva plan, in particular regarding its impacts on tenure and property rights institutions in the area. In March 1997, the Minister wrote that the Silva plan would involve “sweeping changes to legislation, the timber tenure system, the roles of provincial and local governments in social, economic and environmental decision-making and the flow of revenue to the province.”⁴⁴ He therefore proposed a working group to develop procedures for testing aspects of the Silva plan on a smaller scale. He proposed the 18,000 hectare Perry Ridge area as a suitable landscape unit. The Silva Forest Foundation rejected the Minister’s offer to deal initially with the Perry Ridge area: “Given the geographic

⁴⁴ Letter from David Zirnheldt, Minister of Forests, to Silva Forest Foundation, March 14, 1997

integrity of the Slocan Valley, Perry Ridge is not an appropriate model".⁴⁵ Regarding the SVWA proposals to negotiate resolution to land use conflicts in the area,⁴⁶ the Minister of Forests replied in May 1997 that: "Based on the expected impacts of your conditions, I cannot support implementation of your proposal".⁴⁷ This set the stage for further conflict as the logging season opened in 1997.

In the summer of 1997, further civil disobedience took place in various hotspots in the Valley. This followed attempts by activists to legally challenge the issuance of cutting permit 130 to Slocan Forest Products in New Denver Flats. This case provides an example of the juridical process being limited to supporting the status quo of timber extraction and the dominance of the Ministry of Forests as lead agency regarding Crown forest lands. In July 1997, the Supreme Court of British Columbia ruled in a case brought by the Valhalla Wilderness Society against the Province of British Columbia and Slocan Forest Products. Valhalla Wilderness Society (VWS), an environmental NGO based in the Slocan Valley, petitioned the court to declare invalid a forest licence, cutting permit and road permit issued to the respondent Slocan Forest Products Ltd by the Ministry of Forests in the New Denver Flats area of the Slocan Valley. VWS argued that the licence and permits were invalid on two counts: firstly, that certain areas to which the licence and cutting permit applied were watersheds which had been established as community water "reserves" in 1973 under section 16 (at the time section 12) of the Land Act, and therefore "may not be 'disposed of' in any way including the granting of licences and

⁴⁵ Letter from Susan Hammond, Director, Silva Forest Foundation, to David Zirnheld, Minister of Forests, April 14, 1997.

⁴⁶ Proposal for Negotiated Settlement of Slocan Valley Forest Use Conflicts, SVWA, October 11, 1996.

⁴⁷ Letter from David Zirnheld, Minister of Forests, to SVWA, May 1, 1997.

permits to harvest timber thereon”⁴⁸; and secondly that VWS, other interested groups and members of the public had a legitimate expectation to public input in decision-making regarding the issuance of cutting permits as a result of previous government actions, notably the commitment to establish a community resource board under the CORE process⁴⁹.

With regard to the first point, and the status of community water reserves, Justice Ray Paris referred to official correspondence of the Ministry of Lands and the Ministry of Forests when elaborating his ruling. VWS had submitted evidence in the form of correspondence and memoranda, starting with a letter in June 1973 from the office of the Chief Engineer of the Water Investigations Branch of the Department of Lands, Forests and Water Resources to the Minister of Lands, requesting a number of community watersheds on Crown Land in the area should be withdrawn from disposition to other uses. Subsequent memoranda submitted as evidence referred to “reserves” having been placed on “community watersheds”. VWS argued that this demonstrated that “reserves for water supply purposes were created and that it was not within the power of the Ministry of Forests to issue forest licences or cutting and road permits with respect to those areas”⁵⁰. Justice Paris disagreed with this interpretation, and presented an analysis of the interplay between the Land Act and the Forest Act and other correspondence between ministries over the period, concluding that the Land Act did not supersede the Forest Act in such a case and that the Minister of Lands did not have jurisdiction over the community watersheds in question:

⁴⁸ Supreme Court of British Columbia ruling s97-1030 paragraph [3]

⁴⁹ See below for a discussion on the CORE process

⁵⁰ Supreme Court of British Columbia ruling s97-1030 paragraph [7]

“Section 16, therefore, clearly does not supersede the provisions of the Forest Act and the Ministry of Forests Act nor permit the Minister under the Land Act to withdraw Crown lands from disposition under the Forest Act, dispositions such as forest licences and cutting and road permits.”⁵¹

The second point upon which VWS sought the invalidation of cutting permits in the New Denver Flats area was on the grounds that it had a legitimate expectation of input into decision-making regarding the issuance of cutting permits and that this was denied. The 1992 Commissioner on Resources and Environment (CORE) Act, which created the CORE process, was established as a result of the government’s commitment to increase public input into land use plans. The CORE process specifically sought the establishment of regional land use planning boards, community-based participatory processes and a dispute resolution system (Mason, 1996)⁵². In the region in question, the West Kootenay Boundary Land Use Plan was published in March 1995 as a result of the CORE process, stating that future community involvement would provide a local say in the implementation of the land use plan; it further stated that Community Resource Boards would be established to ensure local input and advice on the implementation of the plan and that the boards would provide advice on government development of resource management objectives and guidelines. VWS argued that this created a legitimate expectation that they, other public interest groups and the public should have the opportunity to input and participation in any decision to permit timber harvesting. However, they claimed that the decision by the Ministry of Forests to grant a cutting permit to Slocan Forest Products in the New Denver Flats area (cutting permit 130) without having established and consulted a Community Resource Board meant that their legitimate expectation to input and participation in the decision to grant the cutting permit had been denied.

⁵¹ Supreme Court of British Columbia ruling s97-1030 paragraph [19].

⁵² For more details see the Commissioner on Resources and Environment Act, s 4.2a, b and c.

In his ruling on this point, Justice Paris considered the “legitimate expectation” doctrine, stating that, whilst it could create procedural rights for a party whose substantive rights could be affected by the decision of an administrative body, it did not in itself create such substantive rights. Paris stated that in this case there was no clear right, for example a property right, of the petitioner that was affected by the decision. Whilst the judge acknowledged that the members of the petitioner (VWS) were interested parties in that their concerns were the common good, he did not find on the evidence any substantive right of the petitioner. He further cited a Supreme Court of Canada ruling that, where applicable, legitimate expectation can “create a right to make representations or to be consulted. It does not fetter the decision following the representations or consultations.”⁵³ In applying this doctrine, he stated that there was no legitimate expectation in this case that the petitioner had any right to input in the actual decision-making process:

“Nothing in the legislative framework of the CORE process, the terms of the West Kootenay Boundary Land Use Plan or the Slocan Valley Pilot Project deliberations could reasonably lead to an expectation of a right to share in the actual decision-making process.”⁵⁴

Justice Paris further stated that there was no legal requirement to establish community resource boards and that, even if established, such boards would have advisory and not mandatory functions. He also stated that the petitioner had had ample opportunity for the kind of input and participation foreseen by the CORE process. VWS’ petition to have the New Denver Flats permit invalidated was therefore rejected on both points by the judge.

⁵³ Supreme Court of British Columbia ruling s97-1030 paragraph [31], citing *Reference re Canada Assistance Plan* (1991), 58 B.C.L.R. (2) 1 at p.24, in the Supreme Court of Canada

⁵⁴ Supreme Court of British Columbia ruling s97-1030 paragraph [32]

This case has relevance to a number of issues raised by the analytical framework. In the context of public input to forestry policy and management plans in BC, it upheld the predominance of the existing rights of the Ministry of Forests to allocate forests for timber harvesting and indicated the nature of the juridical process in upholding the status quo. Also, the right to input and participation by the public did not extend to the right to be involved in actual decision-making: the public had the right to express their concerns or objections, but the government had no obligation to take such concerns or objections into account. This is a clear example of the distinction between participation and empowerment discussed in Chapter Two, and contrasts with the ruling in the Haida case cited above. The lack of meaningful participation in decision-making was a source of ongoing dispute with the government for civil society groups in the Slocan Valley over the years. Interviewees consistently stated that the fact that the government refused to listen to them, despite the many years of input that had been made in good faith, was a source of extreme frustration in the communities and appears to have been a significant factor in the blockades and civil disobedience that took place in the summer of 1997. After the Supreme Court of BC decision outlined above, 175 people protested against road building at New Denver Flats, with an injunction being served against them three days later, with seven people being arrested. In neighbouring Perry Ridge, 150 people protested against the start of construction of a 7.7 km logging road. An injunction issued at the end of July and enforced in August saw 16 people arrested. In September 1997, 80 people protested in Bonanza Creek, with 12 people arrested.

The main arguments put forward by community associations against logging in the Slocan Valley were based on the fact that the area has inherently unstable terrain and logging would exacerbate this, resulting in potential damage to life, limb and property,

and that logging activities threatened the consumptive use watersheds that are the main source of potable and agricultural water in the valley⁵⁵. These arguments were supported by independent and Ministry-commissioned studies of the area, although the reports were suppressed by the BC government when the Ministry of Forests applied to the BC Supreme Court for, and was granted, an injunction against road blockades on Crown Land in Perry Ridge in the summer of 1997. Justice Parrett, overturning his Supreme Court injunction in November 1997, referred to the misrepresentation and suppression of reports and the suppression of information about actual landslides that had occurred in the area, when the BC government made its application for an injunction:

“There is found within these expert reports a disturbing consistency. Each raises significant concerns and each directly or by implication calls for or recommends more detailed study....in my view these reports, coupled with the incidents of landslides....represent a significant area of concern which was almost entirely absent from the court application in July”.⁵⁶

Subsequent to the overturning of the injunction, it further came to light that the BC government had also misled the court regarding the land tenure of the area in question, claiming it all to be Crown land when in fact some of it was private land that the government was in negotiation to acquire at the same time as it applied for the injunction against blockades on Crown land. It transpired that some of those arrested were actually on private property and not Crown land and that this was known by Ministry representatives present during the arrests.⁵⁷

⁵⁵ See, for example, the web sites of various water users associations in the valley, including the umbrella Slocan Valley Watershed Alliance at www.watertalk.org/svwa; the Perry Ridge Water Users Association at www.watertalk.org/svwa/perryridge and the Elliot Anderson Christian Trozzo Watershed Alliance at www.watertalk.org/svwa/eact.

⁵⁶ BC Supreme Court. Justice Parrett overturning the Perry Ridge injunction, November 15, 1997, cited in Perry Ridge – Slocan Valley Press Release, April 23, 1998.

⁵⁷ Perry Ridge – Slocan Valley Press Release, April 23, 1998.

To summarise, inter-relationships between local communities and the timber regime in the Slocan Valley were based on distributional conflict and the unequal power of the bargaining parties. Although many people in the Valley's local communities opposed large-scale industrial forestry, favouring either no logging or ecosystem-based management, the status quo timber allocations meant that calls for tenure changes were rejected by government. Efforts to gain adoption for the Silva plan failed because the government believed that the concepts would fundamentally challenge the status quo timber regime, decision-making and forest management, not just in the Valley but also by extension throughout the Province. However, in a neighbouring area with a similar history of community/timber regime conflicts, the outcome was different.

The communities of Harrop and Procter are situated on the south shore of the west arm of Kootenay Lake, which stretches from Nelson in the west (see map 6.2). Commonly referred to as a single settlement, Harrop-Procter consists of a strip of dwellings along the lake and road, and has an adult population of 460.⁵⁸ At the time of the field visit, this rural community was not dependent on forestry industry jobs, as the forests in the vicinity remained unallocated in the 1990s. However, from as early as 1976, as part of a consultation process by the Ministry of Forests, residents were expressing concern about the potential problems that would be caused to their community watersheds and environment if proposed industrial logging were approved. In particular, there were concerns expressed at a proposed logging road in a sensitive area that posed a threat to domestic water supplies and soil stability. In 1984 there were renewed rumours about proposed logging activity in the Lasca Creek area and at a public meeting in Harrop the

⁵⁸ According to 1996 census statistics cited in HPWPS (1999)

community was presented with a “minimally changeable end result”.⁵⁹ Over the next eight years, community representatives took part in meetings and made input into forest management strategy. In 1992, the community’s application for a Model Forest was rejected. By 1995, participation in the local CORE Table caused divisions within the community between those who adopted a “wait and see” attitude and those who were lobbying for a West Arm Wilderness protected area that would include both the Harrop-Procter area and Lasca Creek. In the end, the Kootenay Boundary Land Use Plan and Implementation Strategy released in 1995 as a result of the CORE process excluded key areas from the West Arm Wilderness Area, making them available for timber extraction.⁶⁰ The community activists were deeply frustrated that promised language on community forests was omitted and Community Resource Boards did not materialise. In 1995 the Harrop Procter Watershed Protection Society (HPWPS) was formed to “protect the quality of our water sources which we see as being potentially threatened by the Ministry of Forests announced intentions to commence commercial logging in the Harrop-Procter area” (HPWPS, 1996a). Committee members were split between those who favoured community ecosystem-based planning as espoused by the Silva Forest Foundation and those who favoured total protection.

A questionnaire conducted by HPWPS in 1996 amongst local residents showed a slight majority support (51.3%) for land use “managed by the community, using ecosystem-based planning with the possibility of sensitive logging”, with the remaining respondents split fairly evenly between current forestry practices (23.5%) and no logging or resource extraction at all (25.2%) (HPWPS, 1996b). From a list of 11 issues respondents had been

⁵⁹ HPWPS, 1999:28 and interviews with HPWPS members

⁶⁰ HPWPS, 1999:31 and interviews with HPWPS members

asked to rate in importance,⁶¹ the number one concern was domestic water quality, followed by wildlife habitat protection and wilderness preservation. Very similar ratings were received for no industrial development in watersheds, logging according to an ecosystem-based plan and non-logging jobs dependent on forests. Forestry industry jobs were considered rather less important (see figure 6.6).

Figure 6.6 Results of rating exercise in Harrop-Procter community questionnaire, ranking issues by importance

Issue	%
Domestic water quality	96
Wildlife habitat protection	88
Wilderness preservation	79
Scenery	75
Closure of watersheds to industrial development	71
Logging according to an ecosystem based plan	71
Non-logging jobs dependent on forests	70
Non-motorised recreation	67
Forest industry jobs	63
Hunting and trapping	40
Motorised recreation	26

Source: HPWPS (1996b)

The community activists in Harrop-Procter took painstaking steps over the next couple of years to identify resident concerns, raise awareness and build consensus in the community around community involvement in forest management and decision-making, culminating in the development of an ecosystem-based plan. This was put forward as an alternative to the industrial logging proposed by the Ministry of Forests for the Harrop-Procter area that had widely been deemed unacceptable within the community. In 1997, HPWPS continued to try to engage in dialogue with the Ministry of Forests to gain approval for the ecosystem-based plan and to find out about proposed work scheduled for the area before it

⁶¹ Respondents were asked to rate each issue on a scale of 0 to 5, but not to rank them in order of preference. Thus, each respondent could give each issue a 5 or a 0

happened. Despite this, an initial stage in identifying areas for logging (terrain mapping) was commissioned by the Ministry of Forests for the Harrop-Procter area without consultation or notification, to the chagrin of HPWPS members who threatened civil disobedience, referring to the example of the nearby Slocan Valley: “Similar clandestine planning and lack of honest communication have resulted in the present volatile situation in the Slocan Valley watersheds. It now appears to us that the Kootenay Lake Forest District is inviting this civil disobedience to spread eastward”.⁶²

At the end of 1997, the Minister of Forests announced the introduction of the Community Forest Pilot Program and HPWPS immediately entered into dialogue with the ministry as they saw this as an opportunity to gain control of their local forest resources and implement the ecosystem-based plan. In February 1998, HPWPS met with ministry staff about the pilot project but were not given an encouraging response. HPWPS were advised that their chances of being awarded a community pilot project were “mediocre at best” (HPWPS, 1997). Nevertheless, HPWPS prepared and submitted a proposal for a community forest pilot project based on the Silva ecosystem-based plan and incorporating a business plan based on producing and marketing a mix of timber and non-timber forest products. The timber part of the business plan was based on projected sales of eco-certified timber and logs, for which there was identified an international market; the creation of a value-added manufacturing plant producing locally designed products; the development of an agro-forestry business combining the harvest of wild herbs and plants from the forest with the growing of organic herbs; production of medicinal tinctures and balms from the locally harvested herbs and plants and, eventually, low-impact tourism (HPWPS, 1999). The business was to be run as a community co-operative.

⁶² correspondence from HPWPS to Ministry of Forests, cited in HPWPS (1997)

Whilst the minister had explicitly stated in a press release that one of the objectives of the new community tenures was to allow communities to test innovative management regimes, there is some evidence that ministry officials were worried about aspects of this. The HPWPS was the only successful applicant to have submitted an eco-system-based management plan devised by the Silva Forest Foundation. The Silva Forest Foundation had for many years prior to this advocated holistic ecosystem-based planning as the foundation for any forest development plans but had not been given the opportunity to put this into practice on Crown land⁶³. Silva plans were seen as radical and contentious by ministry and industry alike, given their basis of ecosystem protection first and timber harvesting as the lowest priority for economic development, and then only within strict environmental limits.⁶⁴ As a result, there was strong resistance to allowing the implementation of this approach on Crown land as it challenged the very basis of forest policy that prioritised timber harvesting. In the case of HPWPS, although the group were informally told that they had been rated very highly by the pilot project application evaluating committee, being ranked first or second by all members, when the first round of successful applicants were announced in June 1999 HPWPS were not on the list, nor were they one of the two further successful applicants announced in early July 1999. During negotiations between HPWPS and the ministry in Victoria in June 1999, it transpired that the main stumbling block for the ministry was the Silva plan, and that the AAC in the Silva plan was about half of that proposed by the ministry itself.⁶⁵ In other words, according to the Ministry of Forests district office, the HPWPS were not going to cut enough timber. Silva and the District Office agreed to differ on the AAC and, apparently after concerted

⁶³ Interview with Silva Forest Foundation director, February, 1999.

⁶⁴ Personal communication with HPWPS member, June 1999; correspondence between ministry of forests and Silva Forest Foundation and Slocan Valley Watershed Alliance, 1996.

⁶⁵ Personal communication with HPWPS member, July 1999.

behind the scenes lobbying by the evaluating committee, HPWPS was eventually offered a CFPA in July 1999.⁶⁶

To summarise, in both the Slocan Valley and Harrop-Procter areas there had been a strong history of community demands to be involved in decision-making regarding forest management and allocation decisions. This was articulated as a desire to protect domestic and agricultural water supplies, to promote local economies and for aesthetic, recreational and environmental protection. In both areas, these objectives were promoted by community activists as complementary and not competing goals. This manifested itself in the development of community and eco-system-based management plans; input into public consultation processes; civil disobedience; public awareness raising and mobilisation; community questionnaires demonstrating majority support for greater community control and protection of watersheds; and the lobbying of district and provincial governments. Whilst there were a number of similarities between these two areas, the outcomes were rather different in the 1990s. In the Slocan Valley, by the end of the 1990s communities had made no progress in gaining greater control over local forest resource management and decision-making, with civil disobedience and litigation still featuring as tools to try to achieve these objectives. By contrast, in Harrop-Procter by the end of the 1990s there had been the award of a community forest tenure and a community co-operative was established to implement its eco-system based community management plan. There are a number of possible reasons for this disparity in outcomes. Although it is not possible to assert which were the most influential given the data collated, many of these reasons have strong property rights connotations. Firstly, even though both areas lay within the Nelson Forest Region and

⁶⁶ Personal communication with HPWPS member, July 1999

were both considered to be holistic eco-system units, the Harrop-Procter area was smaller, at 10,860 hectares, compared with the much larger area of the Slocan Valley, at 342,000 hectares. The issue of scale is in itself significant for a number of reasons. A number of separate communities were dispersed through the Slocan Valley, containing around 2,000 residents, so presenting a united voice to the authorities was more challenging, whereas the community of Harrop-Procter, numbering around 650 residents, was spread along one particular strip of the West Arm of the Kootenay Lake, and therefore was more socially cohesive. Whereas both Harrop-Procter and the Slocan Valley could be persuasively argued to be a single landscape unit from an ecological perspective (Silva Forest Foundation, 1996 and 1999), it proved difficult in practice to get the government to accept this in the case of the Slocan Valley, as demonstrated by the Ministry of Forest's unsuccessful attempts to persuade Slocan Valley Watershed Alliance, Perry Ridge Water Users Association and Silva Forest Foundation to treat the Perry Ridge area as a discrete Landscape Unit for trialing the alternative management model. Linked to this, any changes in management approach in the Slocan Valley as a whole would affect a relatively large portion of Crown land allocated to timber harvesting compared to Harrop-Procter, and therefore could be expected to meet with greater resistance from the status quo.

Also of significance was the difference in tenure between the two areas. In the Slocan Valley, most of the Crown forest land had already been allocated as Tree Farm Licences or volume-based licences to industrial interests, in particular Slocan Forest Products. In Harrop-Procter, such allocations had not yet taken place, although they were slated to. This meant that Slocan Valley community members were fighting tenures that had already been awarded to third parties, whereas in Harrop-Procter people were protesting

against the award of such licences. Thus, status quo vested interests were not as strong in the latter area, particularly in terms of corporate interests. In the Slocan Valley on the other hand, protestors were up against both the government and corporate interests, and thus their relative bargaining power was weaker than in Harrop-Procter. In terms of bargaining power, there was another factor that influenced the Harrop-Procter outcome. The community forest legislation specified that no Crown forest lands or available annual cut would be reallocated to the new tenures: applicants had to identify unallocated forest areas and available annual cut in order to be successful. Given the high degree to which Crown forest land and available annual cut were already allocated in forest licences, finding spare land and volume was by no means a foregone conclusion. The Harrop-Procter community were able to identify unallocated Crown forest land and available annual volumes to successfully fulfil the criteria for a community forest tenure.

Ideology seems to have played a role in both locations regarding the effectiveness of advocacy of different institutional models. Resident surveys in both locations consistently showed overwhelmingly that the issue of greatest concern to residents was the protection of their domestic use watersheds. However, there had traditionally been less agreement around whether the solution lay in banning logging altogether or whether environmentally sensitive logging should be permitted. This indicates the existence of differing ideologies at the local level about the most appropriate institutions. Interviews with key community activists in the Slocan Valley suggested that they favoured the no logging solution, with the development of alternative non-timber industries being proposed by them as an alternative economic development model. In Harrop-Procter, HPWPS community activists successfully persuaded

residents that an ecosystem-based plan that included timber harvesting was the best option for the community, even though at the time of the questionnaire more local people appeared to favour environmental and wildlife preservation to logging according to an ecosystem-based plan (see figure 6.6). In the end, the Harrop-Procter scheme appears to have been successful because the government had no reasonable cause to reject it, whereas, for a number of reasons outlined above, Slocan Valley community proposals were more challenging to the status quo and therefore more likely to be resisted.

6.5 Conclusion

British Columbia presents a classic example of the dominant global forest management regime, namely a mix of production and protection forests, with timber production being the main objective, and with the state and corporate interests controlling and managing the forest resource. Tenure also fell within the dominant model, with the state maintaining control of public forests, devolving management of timber production to private corporate interests through varying tenure arrangements. Protection forests were either under provincial or federal jurisdiction. Although they laid claim to most of the province as traditional territories, First Nations had been assigned lands, including reserves, accounting for less than 1% of the province. Local forest communities had no input into decision-making regarding the forest resource and traditionally had only limited opportunity to manage forest resources within existing tenure structures.

The 1990s saw the emergence of a new forest politics, with the language of public participation being adopted by government through processes such as CORE and the establishment of a Treaty Negotiation process with First Nations. Nevertheless, by the

end of the decade very little had actually changed in terms of forest tenure. Increasing public pressure had been brought to bear on provincial governments over many years before limited tenure changes were introduced in 1998. The Community Forest Pilot Agreements and the Nisga'a Agreement, both finalised in 1998, represented the only ceding of control and management by the province to community groups, and in Clayoquot Sound a joint management agreement was reached between the province and First Nations. Critics of the dominant forest management regime argued that the government ceded control and management of the forest resource to private corporate interests as a matter of course. The property rights institutions in BC reflected the heterogeneity of bargaining parties, establishing distributional norms that proved resistant to change. By the end of the decade, of the nearly 59 million hectares of forest lands in the province, only 200,000 hectares had passed to First Nations ownership and just over 163,000 hectares were given community forest tenure status, totalling only 0.61% of forest lands. Meanwhile, 94% of provincial forest lands were held under timber licences, primarily by large corporate interests.

The status quo power relations proved resistant to change, even once precedents had been set. For example, the joint management agreement in Clayoquot Sound that brought First Nations in as equal decision-makers, redressing the power imbalances that had existed between First Nations, the government (Ministry of Forests) and private sector (MacMillan Bloedel, later Weyerhaeuser), was not used as a model for other areas. Indeed any kind of sharing of decision-making was still resisted. For example, in the legal case brought by the Haida Nation discussed above, the Ministry of Forests and the very same company were found guilty by the court of not undertaking good faith consultations with the Haida, a duty they were legally bound to undertake. The

increased calls for community involvement in forest management in the 1990s marked an ideological shift away from wilderness protection towards community development of forest resources for ecological and local economic objectives. However, opportunities to implement community control over forest resources were extremely limited and were resisted by the Ministry of Forests, for example in the Slocan Valley. Even in Harrop-Procter, there was initially some resistance by the ministry to accepting their ecosystem-based plan as a Community Forest Pilot Agreement, on the grounds that the plan foresaw a greatly reduced annual cut compared to that recommended for the area by the Ministry.

Nevertheless, despite the immense resistance to change by the dominant timber regime, by the end of the 1990s key events such as the election of a government with more sympathetic leanings towards inclusive forest policy decision-making, the strategic alliances between First Nations and environmental groups, and the increasing acceptance of alternative ideologies to the dominant production/protection paradigm helped to engage government and the private sector in a more inclusive forest management culture during the decade. Whilst the Clayoquot Sound joint management agreement, the Nisga'a Treaty, the community forest pilot agreements, and First Nations treaty negotiations had by the end of the decade effected only minimal property rights changes, they helped to transform the forest policy debate, and point to societal value shifts that occurred during the period and the receptivity of government and private sector to engage in dialogue with other actors. However, at the same time the status quo and vested interests represented massive impediments to fundamental change in forest management control and decision-making. First Nations had been largely excluded from land use decision making and forest policy for the past century and more

(Braun, 2002) and other forest communities had even fewer opportunities to change the dominant timber regime and the system of property rights that excluded them from forest management control and decision-making. Any further settlement of First Nations claims were likely to challenge existing property rights arrangements in fundamental ways.

Although the provincial government controlled most of the province in the public interest, this would be subject to change as treaty negotiations unfolded in the future. The legality of exclusive logging rights such as Tree Farm Licences held by private corporate interests were likely to be subject to challenge on lands where Aboriginal title could be established.

This chapter has sought to analyse how the forest management regime in British Columbia has evolved, the nature of interactions between local forest communities and the dominant forest management regime and the property rights implications of the dominant forest management regime for local forest communities. The analytical factors identified as influencing institutional choice and change in Chapter Two appeared to be influential in BC and can help explain the complex processes surrounding property rights institutions for forest management in the province. Thus, underlying the dominant forest management regime, distributional conflict was evident. The relative bargaining power and ideological beliefs of the social actors appeared to be fluid and dynamic, and the changing nature of power relations and value systems appeared to influence institutional outcomes, although the pre-existing distributional norms and divisions of power proved resistant to radical change. The next chapter presents a synthesis of the findings of the two case studies in relation to the theoretical framework established in Chapter Two, presenting a cross-case analysis of the political dimensions of property rights institutions.

Chapter Seven

Cross case analysis

7.1 Introduction

Having presented the data for each case study in Chapters Five and Six, this chapter synthesises the findings from the empirical work conducted in the Solomon Islands and British Columbia (BC) in the context of a political conceptualisation of property rights developed in Chapter Two. The chapter draws on the findings of the individual cases, analysing them in relation to the cross-cutting themes identified in the analytical framework in order to present a cross-case analysis. The empirical work was conducted in two different locations in order to provide a comparative analysis of the political dimensions of property rights and forest management in two different locations. The individual cases presented in Chapters Five and Six addressed three related research questions: how has the dominant forest management regime evolved? What are the property rights implications of the forest management regime for communities? How do local forest communities and the dominant forest management regime interact?

The political dimensions of property rights incorporate considerations of power relations, exclusion, control and competing rights claims as discussed in section 2.4 above (pages 48 to 57). An analysis of the political dimensions of property rights considers them as institutions mediating relationships between social actors regarding a resource, with rights holders being in a reciprocal relationship with non-rights holders, having power over and the ability to exclude the latter. This is in contrast to neo-classical economic approaches to property rights that view them as neutral tools for the efficient allocation of resources and juridical approaches to property rights based on the

upholding of formal laws constituted by the state. It offers a broad conceptual framework that sees property rights institutions not just as functional management options but also as incorporating complex and dynamic processes and relationships between social actors. In order to analyse the political dimensions of property rights and forest management, an analytical framework was proposed in section 2.5 above (pages 58 to 67) based on the institutional theory literature. This literature identifies four factors that explain institutional choice and change, namely distributional conflict, bargaining power, ideology and historical path dependence. This analysis of institutional choice and change can explain property rights institutions as being contingent on dynamic processes between social actors that influence outcomes and acknowledges property rights institutions as fluid and subject to evolution, rather than simply being fixed rules. This chapter synthesises the findings from the case studies in relation to the four analytical factors, as a way of comparing unique empirical cases and to provide an explanatory framework for the political dimensions of property rights. Thus, the analysis is guided by the theory and reflects back on the theory. The following sections discuss each of these factors in relation to the empirical data from the two case studies.

7.2 Distributional conflict

As described in Chapter Two, property rights institutions distribute rewards in society, both in terms of wealth and decision-making authority, and as such they create winners and losers. The establishment or modification of property rights are therefore inherently political processes. Distributional conflict is generated when some people perceive themselves to be made worse off whilst others become better off as a result of property rights allocations. There is only conflict when there is disagreement over the allocation

or modification of property rights – if all are in agreement with the outcome, conflict does not arise. Distributional conflict can constrain property rights choice and change because those who will be made worse off by the new arrangement have a vested interest in opposing that change. Conversely, those who would benefit from change have an incentive to support it (Wang, 2001; Knight, 1992), although North (1990) and Libecap (1989) argue that it is often much more difficult to change the status quo than to leave arrangements as they are. Libecap (1989) points out that politicians and regulatory agencies may also favour status quo institutions if, in the case of the former, there are political risks associated with the change or, in the case of the latter, change could undermine their regulatory authority over the resource.

Distributional conflict was in evidence in both the Solomon Islands and British Columbia case studies at a number of different levels, not only over the assignment of the rights to a benefit stream but also over the distribution of decision-making authority. In the Solomon Islands in the 1990s it was clear that, notwithstanding the continued importance of customary land tenure as the legally recognised property right institution to 87% of land in the Solomon Islands, the development of the timber industry had distributional consequences, with decision-making and control over certain aspects of forest management being allocated to state and private corporate interests, assigning both *de jure* and *de facto* rights and benefits. The state's policy-making powers guided the overall development of the timber industry and it established the parameters within which timber cutting rights were negotiated. National government also established the regulatory framework, with the Standard Logging Agreement elaborating the minimum legal operational requirements of the timber industry in the forest, and raised revenues through fiscal measures that assigned most of the surplus income to the central treasury.

In addition, both national and regional tiers of government had the power of veto during the formal procedure to assign timber cutting rights. Thus, within the legal framework, notwithstanding the continued existence of customary tenure, decision-making and management of the forest resource became dissipated, as did the rights to the benefit stream from forests. As a result of this dispersed distribution of decision-making, management and control, there was widespread feeling amongst local community members and some state representatives interviewed that commercial forestry operations were undermining customary tenure, leading to a *de facto* loss of control by local communities over forest resources, even when customary tenure still existed.

Notwithstanding the regulatory framework, informal (often illegal) processes exacerbated distributional inequalities, leading to conflict at various levels. Within the state, conflict was evident between those politicians and officials who wanted to rein in the worst excesses of the industry, tackle corruption and halt the flight of capital to overseas parent companies, and those who allegedly benefited personally by alliances with industry. Within communities there was conflict between those who benefited personally from logging deals and those who saw little or no benefit from these deals but bore the brunt of the environmental costs. There was also conflict between communities and the timber industry in those instances where payments failed to materialise and promises made by companies to provide infrastructure in order to obtain community consent for logging were not honoured. It was felt by those interviewed that companies harvested the valuable timber and then disappeared, often leaving environmental degradation and diminished resources in their wake. As a result of this distributional conflict, there were a number of court cases by landholders to claim compensation for damages by the companies.

In British Columbia in the 1990s, there was conflict over forest resource allocation decisions. Commercial timber exploitation was the predominant use, with 94% of provincial forests being allocated to large-scale timber harvesting through a system of licences and concession agreements that were held by corporate interests. Local forest communities rarely saw a specific monetary return locally from timber extraction, other than through the provision of employment. Local forest communities were excluded from decision-making regarding local resources. Frustrations ran high in the 1990s because the elaborate consultation processes set in train throughout the province did not grant the power of veto for development schemes nor allowed local communities a say in timber allocation decisions. The juridical system upheld this exclusion from decision-making, ruling that the right to participation did not equate to the right to take part in decisions. This example of participation without empowerment, as described in Chapter Two, added to the frustration felt by local communities in the locations visited and resulted in increased incidents of civil disobedience in the Slocan Valley.

The 1990s also saw increasing conflict over the allocation of forest resources to timber production rather than wilderness protection. Widespread opposition to commercial logging was epitomised in Clayoquot Sound, which became a province-wide symbol of forests as contested domains. However, although the largest, the Clayoquot protest was not the only one to take place in the province. Since the 1970s there had been protests in many areas as logging moved to previously unlogged areas of forest. The 1990s saw increased discourses around community control of forest resources and local community development plans and this also proved to be a direct challenge to state control and decision-making regarding the mix of development and protection that was appropriate at a local level. The case studies from the Nelson forest region described in

Chapter Six are examples of the consistent level of opposition at a local level to many logging plans, and of how local community management plans were used as a way to challenge distributional norms.

Potentially the most significant distributional conflict in BC was that between First Nations and provincial government control of land and resources. Traditional First Nations territories used to cover all of the Province of British Columbia, including those areas under industrial timber licences. Because treaties were not signed between the British colonial powers and First Nations, apart from in a tiny portion of the province, First Nations lay claim to these territories. The provincial government had for decades claimed that these rights were extinguished. First Nations successfully argued the theoretical existence of aboriginal title (the Supreme Court decision on *Delgamuukw* in 1997) but by the end of the 1990s had not yet gained legal support for aboriginal title to specific areas of land. Thus, although the principle of aboriginal title had been established, this was seen as only the first step in attempts to establish aboriginal title in practice. First Nations continued with legal and negotiated routes towards redressing the historic injustices in land policy they claimed denied them their legitimate land rights. Given the implications of any treaty settlements for future decision-making and resource use, and given that most of the province's forests were allocated to long term forest tenures held by private corporate interests, the treaty negotiation processes set in train during the 1990s reflected fundamental distributional conflict within the province. The process became mired in problems by the end of the decade, as a result of significant differences between the negotiating parties over issues such as the amount of land that was available for settlement and the nature of the process itself. Thus, the treaty negotiation process proved to be highly politicised within the province due to its

long term implications for many of the existing resource use allocation and management decisions, and rights to the benefit stream.

In conclusion, by considering distributional conflict in the empirical cases it was possible to analyse forests as contested domains and to see beyond the existing tenure arrangements to consider who perceived themselves to be the winners or losers in both existing property rights allocations and to understand calls for property rights change. Despite the different underlying tenure arrangements in each of the case studies, with forests in the Solomon Islands being held mainly under customary tenure and forests in British Columbia being held mainly under provincial control, distributional conflict was nevertheless evident in both locations. In particular, conflict manifested itself around the allocation of forests to commercial timber exploitation and the implications in terms of winners and losers of the distribution of rights to the benefit stream and decision-making. The ability of individuals and groups to influence property rights changes are discussed in the following sections.

7.3 Bargaining power

As discussed in Chapter Two, the relative power of bargaining groups is of critical importance in determining which property rights institutions are established and whether and how they change. The fact that asymmetries in power exist between heterogeneous bargaining parties means that some are more able to influence outcomes than others. As discussed in the previous section, some of the interested groups perceive they will be made worse off by changes in property rights and this gives them an incentive to oppose those changes, whilst others support them because they perceive they will be made better off by the changes. As noted by North (1990) and Ensminger

(1996), the outcomes from such bargaining rarely have anything to do with efficiency, being much more about the location within society of political power and the subjective worldviews of the bargaining parties regarding where their interests lie. Sources of power include financial resources, access to technology, access to and connections with decision-makers, including politicians and bureaucrats, access to information and strategic alliances with interest groups. Bargaining parties can be private claimants (individuals or corporations), bureaucrats and politicians, all of whose positions will be shaped by their expected private gains and by the actions of the others (Libecap, 1989). These gains include the distribution of decision-making, control and authority as well as economic returns. Thus, politicians may assess the political risks of institutional change in terms of popularity with voters whilst regulatory agencies will consider the implications of change for the maintenance or expansion of their regulatory authority.

In the Solomon Islands case study, an analysis of the asymmetries in power between the bargaining groups, and their knowledge, experience and access to financial, technical and information resources, helped to explain how certain actors were able to influence property rights outcomes. Whilst customary tenure and the formal procedures for allocating timber cutting rights suggested that customary landholders were equal partners in the timber regime and that power and control of decision-making rested with them as they could approve or reject timber cutting rights on their land, the reality often proved to be rather different. The private sector was expected to negotiate directly with customary landholders in order to gain access to forests and to be allocated timber cutting rights to customary land. The state established formal procedures to govern this interaction and had a role to play in mediating various stages of the formal negotiations, as described in Chapter Five. Landholders had the power of veto, in that all legitimate

landholders were supposed to agree to timber production before it could go ahead. As discussed in Chapter Two, the power of veto is often considered to be a key element in community control (Mitchell and Carson, 2001). However, evidence presented in Chapter Five suggested that in reality customary landholders did not find themselves in a position of equal bargaining power, either with the timber industry or amongst each other. In practice, interactions with the timber regime often undermined customary landholding and the communal nature of social relations, with coercion or fraud frequently being used as a means of gaining consent.

The complexity of formal procedures, lack of infrastructure and high illiteracy rates, meant that many people did not in fact have effective access to the decision-making process, and they were often disadvantaged in relationships with the state, the private sector and members of their own community. On the other hand, the complexity of customary tenure and use rights to forests often made them impenetrable to outsiders, resulting in the self-appointment of community leaders who undertook negotiations with companies, thus undermining existing decision-making structures within communities and leading to abuses of power. Interviewees consistently described how legitimate landholders were deliberately excluded from decision-making by both company representatives and local individuals in order to expedite the (fraudulent) approval of timber cutting rights, often for personal gain.

It is clear from the empirical data that financial inducements were commonly used to influence the decision-making process regarding the allocation of timber cutting rights. Local Area Councils on occasion assumed decision-making powers beyond their statutory obligations in order to fraudulently award timber cutting rights. Within local

forest communities, divisions were created or deepened as a result of interactions with outsiders who wanted to control the forest resource. The power imbalances within communities were exploited, both by timber companies and by individuals within communities in order to expedite agreement for timber cutting rights. Because the formal procedure was dependent on unanimous agreement by the whole landholding community in order for timber cutting rights to be assigned, and given the complexity of customary land tenure, this could in itself be a lengthy and difficult process to negotiate. A new elite therefore emerged who either brokered deals on behalf of the community or fraudulently signed documentation in the knowledge that not all landholders agreed with or even knew about the development plans. In return, this new elite benefited financially as a result of payments from timber companies and in terms of power and authority within their landholding communities. High illiteracy rates, particularly amongst women and the elderly, lack of infrastructure and the remoteness of many rural communities meant that information, or the lack of it, became a potent tool used by those who stood to gain from the assignation of timber cutting rights.

Asymmetries in power were also evident between the state and timber companies. The weak nature of the state meant that it had extremely limited enforcement capacity to ensure that the legal framework was adhered to. Therefore, its control of forest management practices was minimal, as evidenced by the widespread environmental damage caused by logging on both state-controlled and customary land. The state also showed itself to be incapable of capturing full economic rents from the industry due to the prevalence of illegal transfer pricing activities, such as mis-declaring species and under-reporting export volumes. As a result, although the state-civil society links within Solomon Islands society were traditionally very strong, with politicians and bureaucrats

maintaining close ties to their homes through language, kin and tenure ties, the perception grew in the 1990s that the state supported the timber industry rather than rural communities. In addition, reports of corruption of politicians and officials by timber interests further undermined legitimate state authority.

Empirical evidence suggested that local forest communities were also finding ways to assert power, and building alliances to support them, for example by using sympathetic officials such as the Public Solicitor and seeking alliances with development and environment NGOs and other external support in order to strengthen their bargaining power. For example, communities were asserting their interests through instigating court cases in order to claim compensation or sanctions against timber companies. They were also developing community eco-timber, eco-tourism and other local resource management plans in order to reassert control over local resources. These institutions were based on customary land tenure and social norms, but were adapted to take account of new discourses such as the explicit inclusion of women in decision-making and environmentally sustainable activities.

It is clear in the Solomon Islands that there existed a range of heterogeneous interest groups, with different levels of bargaining power that affected property rights institutions. The fact that customary land tenure still existed and had not been replaced by state and/or private sector control suggests that customary land tenure in the Solomon Islands had inherently robust institutional characteristics and delivered benefits that were valued by many in society. It also suggests that an understanding of complex processes and relationships is required to investigate how these institutions

were adapting and evolving within a context of rapid commercialisation of forest resources.

Asymmetries in power were also evident in the British Columbia case study. Here, there was no history of local forest community involvement in forest management or decision-making, other than indirectly through the legislative process. As a result, politicians and the Ministry of Forests were constitutionally responsible for the management of the forest resource in the public interest. The distributional norms for the past century involved tenure arrangements to facilitate the development of private sector timber interests. State-industry alliances were therefore traditionally strong, and the Ministry of Forests' principle statutory responsibility was to manage the forest resource for sustained yield timber extraction. Within this framework, local forest communities had little power to influence property rights institutions.

However, empirical data presented in Chapter Six indicate that local forest communities, as in the Solomon Islands, were using property rights institutions as a way of asserting control over local forest resources, although with mixed results. In the Slocan Valley and Harrop-Procter, community activists worked over a number of years to build high information levels on the local forest resource, in ecological and community development terms. They prepared local level management plans, with the assistance of technical experts, to argue for community control of local resources. They also worked to build alliances within the communities they sought to represent, in order to forge greater consensus around the concept of local management. As discussed in Chapter Six, the two locations had different outcomes, and this in itself can be partially explained by the different levels of bargaining power. In the Slocan Valley, most of the forest had already been allocated to timber harvesting, with one company in particular

controlling most of the licences in the area. Thus the timber industry had a vested interest in maintaining the status quo property rights institutions in the area, making change more difficult. In Harrop-Procter, the community was able to take advantage of the fact that timber licences had not yet been awarded to companies in order to apply for the newly legislated community forest tenure pilot project. They successfully built strategic alliances with technical experts and local resource users to promote their interests. Although evidence suggested that forestry agencies may have found this application challenging to the status quo forestry policies, in particular the proposed low harvest rate, the high quality of the application itself, in terms of business and management planning, and behind the scenes lobbying by the evaluating committee members meant that the proposal was accepted. Thus, whilst in the Slocan Valley and Harrop Procter community activists had similar aims, asymmetries in their bargaining power in relation to other actors appeared to affect their ability to influence changes in property rights institutions.

BC's First Nations had been excluded from forest policy decision-making, despite their longstanding claims to aboriginal rights and title. However, they too built alliances with each other and with sympathetic legislators, administrators and other interest groups to enhance their bargaining power and lobby for changing relations with provincial government. They used litigation and negotiation as tools to influence the process of institutional change that would be necessary to accommodate their claims. The difficulty in establishing a legal case pointed to the juridical system giving weight to the status quo property rights and indicated the difficulty in changing these. This was a highly political process within the province, given the existing distributional norms and the redistributive aims of First Nations. Changes would result in vested interests, both

private sector and regulatory authority, being made worse off, both in terms of access to wealth and decision-making authority, so it was a highly contested process.

In BC, the heterogeneity and relative bargaining power of various actors in terms of their ability to influence and modify property rights institutions is clear from the empirical evidence. However, change was evident, despite the relative strength of the status quo arrangements. The introduction by the BC government in 1998 of community forest pilot tenures and the finalising of the Nisga'a treaty in the same year represented the first changes in tenure arrangements to facilitate community control of forest resources in the province. Nevertheless, it remained unclear whether these new property rights institutions would be extended in the province and by the end of the 1990s only had limited application, being less than one percent of the province's forest lands. They did set a precedent for modification and signalled shifting power relations between actors, although it is not clear whether such changes would continue in the future. Ultimately, change may depend on the levels of compensation or side payments that could be agreed upon with potential "losers" in order to gain support for change. Libecap (1989) refers to this process as the level of side payments that are required to achieve support for change, noting that such side payments can in themselves compromise and thus alter the original institutional objective.

As discussed in Chapter Two, when analysing property rights, it is important to look at control, management and decision-making regarding the resource and not just ownership; these can all be assigned to different stakeholders, bringing a level of complexity to understanding the dynamics of forest management, control and decision-making, which in turn confer power on the rights holders (Christman, 1994; Bromley,

1991). The owners are not necessarily those with the decision-making power regarding resource management and the rights to the benefit stream can be allocated to different parties – and all of these dimensions should be part of a property rights analysis. By focusing on the relative bargaining power of the actors, and their ability to influence existing property rights institutions and institutional change, such issues can be addressed. The empirical work highlights the complex and dynamic interrelationships between heterogeneous actors and the ways in which they use financial, technical and information resources to influence outcomes, as well as the way in which building strategic alliances can strengthen their bargaining power.

In both the Solomon Islands and British Columbia, the state facilitated the involvement of the private sector in timber extraction, and this process in turn strengthened the bargaining power of corporate interests. Management of the forest for timber production in both locations was devolved to private corporate interests through licensing agreements, with the onus on the company to devise and implement forest management plans for the area of forest licensed to them, operating within regulations or guidelines established by the state. Although in the Solomon Islands communities played a significant role in granting timber cutting rights, in neither location did communities have input into decision-making regarding forest policies. Nevertheless, evidence from the case studies suggested that power relations were not static and that complex processes and inter-relationships between bargaining parties were shaping institutional modifications in both locations. Community-based management initiatives were being used as a way of resisting the dominant timber regime in both places, echoing the work of Reddy (2002) in Guatemala, where she found common property institutions being used as a political tool to assert authority over forest resources.

7.4 Ideology

Ideology is the subjective beliefs and value systems of the actors, whether individuals or organisations. The explicit assumption is that ideology influences institutional choice and change by shaping how people view the world and how they think the world should be (North, 1990). Recognition of the importance of ideology can explain seemingly non-rational behaviour, and why wealth maximisation is not the strategy pursued by everyone in the real world (Ensminger, 1996). The empirical evidence from the two case studies indicates that ideology can be a significant factor in explaining approaches to forest management and associated property rights institutions.

Ideology has shaped prevailing forest management policies and associated property rights assumptions, as described in Chapters One and Three. The belief that large-scale commercial exploitation of timber, together with protected areas, is the best way to manage a permanent forest resource through managerial and technical skills held by experts has had widespread application in highly forested countries. In both the Solomon Islands and British Columbia, the belief that the private sector was the best agent to develop the timber resource has underpinned forest policy since its inception. Thus, although the underlying forest tenure systems in each location were very different, with 87% of the Solomon Islands under customary tenure and 97% of the of forest lands in British Columbia under provincial state control, policies had evolved in both locations to facilitate access to timber resources by corporate interests. However, despite the predominance of the ideological model of forest management for timber production, there was evidence that other ideological worldviews existed in both locations, and that these influenced the modification of property rights institutions.

In the Solomon Islands, custom and customary land tenure continued to form the basis of all social institutions, despite the pressure of the timber model. The strong adherence by the vast majority of the population to the underlying principles of these belief systems can help to explain how state alienation of forest resources was resisted. It also helps to explain how the timber industry had to develop within an institutional framework of customary tenure and norms, resulting in overlapping rights where timber cutting rights were granted on customary land. Notwithstanding the asymmetries in power described in section 7.2 above, custom and customary tenure were adapting to new influences and this flexibility could be seen to be part of their strength (see also Hviding and Bayliss-Smith, 2000). Empirical evidence suggested that new ideologies were blending with existing ones, with eco-timber and other small-scale resource management projects being adopted within existing institutional frameworks, in turn modifying them with new concepts such as the inclusion of women in planning and decision-making and concepts of sustainable development. Alliances with outside interest groups such as environment and development NGOs and bilateral and multilateral donors provided financial resources and the provision of information to facilitate these developments.

In BC, the dominant ideology behind the allocation of forest resources for timber production was that the corporate sector had the necessary technical and managerial experience and capital to develop the province's forest resources. As a result, most of the province's forests were allocated to timber harvesting by corporate interests. Such allocation of timber production rights was predicated on the view that the forests were vast empty wildernesses to be developed by the state. This compounded the negation of

First Nations land claims, resulting in their exclusion from forest policy development. There was no process by which local forest communities could influence forest policy or allocation decisions. Conflicting ideologies became increasingly apparent, escalating to a “war in the woods” between timber interest groups and wilderness protection groups which reached a peak in Clayoquot Sound in 1993. The widespread use of clearcut logging and its consequences to the visual landscape, plus the “falldown” effect as old-growth forests became increasingly logged out, provided opponents of the timber industry with plenty of ammunition to use in lobbying and advocacy efforts to stop clearcut logging as a harvesting method, and to protect remaining areas of old-growth forest. However, there was evidence that ideologies were not fixed in BC and different views evolved amongst social actors about how the forest should be managed. This was reflected in political outcomes such as the election of the NDP government in 1990 on an explicitly pro-environment platform, and their stated intent to transform the industry after many years of “pro-industry” administrations. On the part of activists, wilderness protection goals were modified, with community-based ecosystem management and planning being seen as a “win-win” opportunity to bring together development and protection objectives and forge consensus at a local level for institutional change.

In conclusion, there is empirical evidence to suggest that ideology can play a role in shaping institutional choice and calls for modification of property rights institutions, although further ethnographic research would reveal more detailed insights into the ideologies of the social actors and how they change over time and influence institutional outcomes. It seems apparent that an understanding of the subjective worldviews of the actors can help explain why forests are contested domains, with conflicting ideologies about how and why forests should be managed being one of the factors leading to

disputes over forest management, access and control in both case studies. According to interviewees in both locations, commercial timber was valued more by government than ecological goods and services, such as potable water, or other potentially more locally lucrative income streams from forests, such as tourism and non-timber forest products. An analysis of the data from the empirical studies suggests that ideology does appear to be a factor in influencing why property rights are chosen and why changes come about, creating a climate conducive to change in congruence with other factors such as alliances with sympathetic political allies. This finding supports those of Wang (2001), who found changing ideologies were influential in how property rights institutions evolve, although neither his case nor the data collated for this thesis indicate whether ideology in itself would be enough to alter the prevailing distributional norms. The empirical data from the two case studies suggests that different social actors have different and evolving worldviews about how forests should be managed and that these different worldviews can, in conjunction with other factors, influence property rights institutions.

7.5 Path dependence

Historical path dependence is defined as the role that existing institutional and ideological structures in a society play in constraining future behaviour (Ensminger, 1996). Thus, past legislation and prevailing distributional norms all influence and constrain the range of institutional options that are possible within a current political system (Libecap, 1989). Historical path dependence can help explain why radical change in property rights institutions is difficult or unlikely, although Heltberg (2002) argues against over-emphasising inertia as a factor in property rights institutions. North (1990) stresses that path dependence does not mean that the future is pre-determined by

the past, although it can explain why small incremental changes over time are more likely than radical change.

In the context of analysing the empirical evidence, an historical perspective is helpful because it can shed light on the political significance of forests over time and how and why property rights institutions were adopted in the context of past forest management objectives and ideologies. In the Solomon Islands in the 1950s, the British administration attempted to introduce a forest management model that had been established in other tropical colonies. The model was predicated on the establishment of a Permanent Forest Estate that was to be managed in the long term for timber production and protection of environmental goods and services. As in other colonies, the establishment of a Permanent Forest Estate meant that large-scale alienation of forest resources would be required by the state in order to allocate concessions to private interests. There was the explicit assumption that Solomon Islanders were not capable of developing a timber industry and that foreign investment would be required to exploit the timber resource. Thus the colonial administration was operating within the liberal paradigm of wealth maximisation through private investments, and associated with that was the belief that Solomon Islanders were unable to develop and manage forest resources themselves. As discussed in Chapter Three, this was a common approach by colonial powers in the tropics (Hisham et al, 1991), and introduced the western liberal concept of ownership of land and natural resources as a source of wealth (Hurst, 1990).

Chapter Five analyses the debates around forest policy in the 1950s and 1960s and the ways by which the Solomon Islanders were able to resist the implementation of policies

that would have meant they lost access to their land. As a result of their resistance, customary tenure remained over 87% of the land. Nevertheless, despite the failure to establish broad public interest in land under the control of the state, the underlying forest management policy of promoting the exploitation of timber by foreign private capital was successful, with legislation for timber licensing on customary lands being enacted in 1977. This established the framework for forest management practice and policies in the 1990s, a period that saw the rapid development of the timber resource by foreign-controlled private interests on customary land, and the creation of overlapping property rights institutions.

Path dependence is one factor that can help explain how, despite the powerful ideological model of forest management based on production/protection of the forest resource described in Chapter Three, the prevailing distributional norms in the Solomon Islands proved a constraint to changes in property institutions that would have seen the state acquire control of the forest resource. After the initial wave of land alienations that took place in the early 20th century and which saw around 12% of the Solomon Islands come under the direct jurisdiction of the colonial administration, Solomon Islanders were able to resist all further attempts by the colonial administrators to gain direct control of land and resources.

In British Columbia, the historical roots of forest policy are similar to those in the Solomon Islands. Under British colonial rule, the province's forests were seen as a vast stock of timber to be exploited by private interests in order to maximise wealth generation. However, whereas in the Solomon Islands attempts to establish a Permanent Forest Estate failed, in British Columbia the state was successful, with most forest lands

in the province being designated as Crown forest lands under the jurisdiction of the provincial government. It is clear that in British Columbia native rights were easier to extinguish than in the Solomon Islands, although the reasons for this were not explored in the empirical work. However, possible reasons related to the property rights framework can be posited. Attempts to establish a Permanent Forest Estate occurred much later in the Solomon Islands and the British approach to its colonies and colonial subjects had changed greatly over the previous 75 years, allowing far more local involvement in management, thus explaining different levels of bargaining power of the indigenous populations in each location. Also, there was only very limited settlement by non-native people in the Solomon Islands, whereas in British Columbia the settler population grew rapidly after the Gold Rush in 1858, helping to establish the colonial property rights paradigms as the norm and making it easier for the administration to deal with only certain sectors of the public and not others, and thus making levels of distributional conflict possibly easier to disregard in BC.

British Columbia thus presents a classic case of the dominant forest management paradigm, with the state controlling the forest resource and delegating management for timber harvesting rights to private corporate interests. A timber licensing system was established in the post-war period to facilitate private sector development of the resource and, despite growing awareness of the multiple values of forests since the 1980s, the predominant goal was still the industrial production of timber. As a result, most of the province's forests were slated for timber production and had been allocated to the private sector. This distributional norm and legislative framework established over decades provided one explanatory factor in why property rights changes in BC were so politically charged and difficult to negotiate in the 1990s.

The empirical evidence from the two case studies indicates that path dependence can be an explanatory factor in why the status quo property rights institutions are difficult to change. Taking a historical perspective shows that within an overall context of institutional stability there is scope for dynamism and change at the margins (North, 1990). Whilst the data suggest that a deterministic analysis of forest management would ignore factors promoting change and would fail to explain modifications that occur, there was evidence to suggest that the status quo was resistant to change. Each case study had very different tenure structures, but in both locations the underlying property rights allocations had remained largely the same since the 19th century. Historical path dependence can explain why changes in the Solomon Islands were resisted even when those changes were promoted by the prevailing forest management ideology and the predicted power structures favouring the timber regime. Incremental modifications did occur in both locations however, in some instances undermining traditional institutions and in others providing opportunities for evolution of alternative institutional arrangements.

7.6 Conclusion

This chapter has synthesised the findings of the two case studies by using an analytical framework that identifies four key factors in institutional choice and change: distributional conflict; bargaining power; ideology and historical path dependence. The strength of the analytical framework is that it offers a way of comparing data and providing an analysis of common themes, but without over-generalising or masking the individuality of each unique case (Libecap, 1989). By analysing institutional choice and change using these four factors, insights can be explored into the political dimensions of

property rights, such as how and why actors are excluded from the resource, the nature of competing rights claims and the way power relations influence which property rights are chosen and whether they are modified. Thus, the framework presents a way of analysing complex and shifting process of institutional adjustments reflecting competing interests, with factors such as bargaining power, different ideological worldviews, and conflict over the distribution of wealth and decision-making power between various actors over time all influencing the evolution of property rights institutions.

The framework is useful because, despite the differences in tenure structures and scale of the case studies, the themes are still relevant. In both cases, the status quo property institutions have proven resistant to significant change. The pre-existing divisions of power and distributional norms within society in each case can explain why different underlying tenure structures exist. In the Solomon Islands, the state-civil society alliances have traditionally been strong, whilst in British Columbia state-industry alliances have been at the core of forest management for decades. This supports the role of path dependence as a factor constraining institutional change. However, the dominance of the forest management ideology that favours timber production by commercial interests has clearly influenced institutional choice and change in both locations, and this in turn has affected the division of power and the ways heterogeneous actors have gained or lost as a result. In the Solomon Islands, this ideology, together with the asymmetries in bargaining power between actors, has resulted in timber cutting rights held by corporate interests overlaying traditional customary rights and often undermining communal norms. In British Columbia, the 1990s saw some shifting ideological positions and bargaining power as a new administration more sympathetic to reform, together with key strategic alliances within

and between civil society groups and First Nations, resulted in the first small changes in tenure towards community control in the province.

It would appear from the empirical evidence that it is the combination of factors that creates the unique circumstances for each particular case and can explain differences in outcomes. The empirical cases suggest that the factors are linked and influence each other. Who gains access to the benefit stream and/or decision-making authority to forests and who is excluded affects what positions the bargaining parties adopt. Outcomes are determined by the relative strength of the bargaining parties to produce the institutions favourable to themselves. These outcomes can in turn be influenced by ideology and different actors' subjective worldviews regarding what is the best outcome. All of these factors over time are influenced by distributional norms and the pre-existing divisions of power within society, and this tends to make changes to the status quo difficult. However, any or all of these factors over time can change and create an environment that favours institutional change. The focus on these key factors within the empirical cases highlights the dynamic and complex processes surrounding property rights institutions and the usefulness of the analytical framework in considering political dimensions of property rights within forest management. Thus, this chapter has used the analytical framework to explain processes and assist comparative analysis; it has also used the empirical evidence to investigate the usefulness of the theory to explain the political dimensions of property rights. The final chapter considers the overall aims of the thesis in the light of the theoretical and empirical work undertaken, discussing the contribution of the thesis, its limitations and possible future research.

Chapter Eight

Conclusion

8.1 Summary of the argument

This chapter critically reviews the thesis. It starts by summarising the key points of the argument and then considers the extent to which the original aims of the thesis have been addressed. Next, the contribution of the thesis is discussed in terms of literature and theoretical development. The chapter then discusses the limitations of the thesis and possibilities for further research.

The thesis argues that a comprehensive property rights framework that elaborates the political dimensions of property rights institutions can illuminate the political nature of distributive decisions regarding the forest resource and can be useful in identifying and analysing the contested nature of forest resources. The framework contributes to an analysis of competing rights claims and the value judgements being made about whose rights take precedence. In the realm of forest management, this often means that private sector interests take precedence over local forest community rights, facilitated by state policies that have historical roots in expropriation of forest resources. A broad conceptualisation of property rights is used, incorporating notions of power, exclusion and competing rights claims, that highlight the inherently political nature of property rights. Within this political conceptualisation of property rights, the managerial and technical approaches to forest management can be understood to mask the fact that forests are often contested domains, with forest-dependent communities' rights and aspirations often at odds with the dominant production/protection regime, despite the growing interest in community forest management both as a concept and as a policy

option. By recognising the dynamic processes and shifting power relations reflected in evolving property rights institutions and the multiple layers of rights claims to the forest resource, the relationships between social actors regarding forests can be explored in relation to the establishment and modification of property rights institutions.

Chapter Two developed the theoretical framework for the thesis. It identified a growing body of literature on property rights and natural resources that addresses the theoretical and empirical case for different property rights regimes, presenting a range of institutional options for successfully managing scarce resources so that they are not overexploited. Traditionally, the debate has focused on the relative merits of private property regimes compared to state property regimes or state regulation. Much of this work is underpinned by concepts of collective action problems, such as presented in the influential Tragedy of the Commons model which states that resource users will inevitably overexploit resources in the absence of externally imposed regulations or private property regimes. A growing body of literature on common property regimes has clarified misconceptions about common property, contributing to an understanding of the circumstances in which communities can self-organise to manage common pool resources successfully. Much of the literature on property rights and natural resources has thus examined the functional nature of property rights institutions, describing an array of institutional options for managing resources. However, less attention has been paid in this literature to critical analyses of the political and dynamic characteristics of property rights institutions. In order to contribute to this analysis, the chapter firstly explored prevailing approaches to property within the western liberal paradigm. It discussed the congruence of economic, juridical and political systems that have led to the predominance of private property as a pragmatic and normative model for delivering wealth maximisation and individual freedom, protected by law. The chapter then

examined the political nature of property rights institutions in terms of complex processes of power, exclusion, distributional conflict and competing rights claims. This approach challenges the assumed neutrality of neo-classical economic approaches to property rights in regard to efficient resource allocation and highlights the power relations inherent in the juridical status quo. The chapter then proposed an analytical framework based on institutional theory as a method of exploring the complex political processes that shape evolving property rights institutions. Institutional theory identifies key factors that act as constraints or incentives to institutional choice and change: distributional conflict, asymmetries in power between bargaining parties; the role of value systems and beliefs; and the significance of historical path dependence. By focusing on these factors, the framework aims to offer insights into how and why property rights institutions are chosen and how property rights institutions evolve over time, considering complex and evolving processes and relations between social actors.

Chapter Three discussed the evolution of forest management policies within the political conceptualisation of property rights developed in Chapter Two. The tragedy of the commons paradigm that presents local people as unable to sustainably manage common pool resources and the western liberal paradigm that property ownership and wealth creation go hand in hand underlie the dominant forest management approach of sustainable production of timber and conservation of ecological services. This in turn has justified the appropriation of forest resources from forest communities by the state and the state's facilitation of private corporate interests in developing the timber regime. As a result, the majority of natural forests are controlled by the state, and private property rights to forests are predominant in the form of timber concessions and other contractual arrangements. Although there is a growing interest in community forest

management both as a concept and as a policy option, this is usually in relation to forests that are outside the main production/protection sphere. However, local forest communities may have claim rights to production/protection forests and may have informal use rights that have evolved over long periods. In such cases, resources are contested and different rights claims can conflict with each other. If, as is mostly the case, local forest communities have no legally recognised, formal property rights to the forest resource or its benefit stream then the juridical status quo categorises them as being excluded from the resource and obliged to respect the rights of the rights holder. The chapter thus highlighted the usefulness of analysing the political dimensions of property rights assumptions underlying management, decision-making and control of the forest resource for timber extraction. By defining property rights as political institutions establishing reciprocal relationships between social actors in relation to forests, issues of power, exclusion and differing, sometimes conflicting, property rights claims can become the central focus of analysis, with forests being understood as contested domains.

In order to investigate these themes in an empirical setting, two case studies were selected: the Solomon Islands and British Columbia. The methodology was discussed in Chapter Four and the findings of the case studies were presented in Chapters Five and Six. The dominant forest management regime in both locations was based on timber extraction by the corporate sector, explicitly because of the belief that the corporate sector was best able to develop the forest resource. As a result, policies had been introduced to facilitate timber harvesting rights by the corporate sector. In the Solomon Islands, where community tenure was the norm and recognised by the state, the nature of the timber exploitation paradigm undermined existing tenure arrangements by

creating another level of rights to forest resources. Here the power imbalances caused by lack of education, poor access to information and the financial inducements offered all undermined existing structures. In British Columbia, where state control of the forest resource predominated, management of the forest resource for timber production by private corporate interests had been explicitly promoted by forest policies for decades. Local forest communities had no input into decision-making regarding forest allocation and use. As a result, the power relations inherent in the prevailing property rights structures meant that changes in tenure were difficult to negotiate. Nevertheless, in both case studies there were examples of forest communities who had managed to establish community forest management projects that included timber production, suggesting that in certain circumstances alternative property rights approaches to the dominant timber regime could be pursued.

Chapter Seven provided a cross-case analysis, using the factors identified in the analytical framework to explore the complex political processes behind institutional choice and change in the two case study locations. The four factors of distributional conflict, bargaining power, ideology and historical path dependence provided a basis upon which to compare common themes in different case study locations and contributed to an analysis of how property rights institutions were chosen and the constraints on and incentives for institutional change. The empirical cases suggest that the factors are linked and influence each other. For example, who gains access to the benefit stream and/or decision-making authority to forests and who is excluded affects what positions the bargaining parties adopt. Outcomes are determined by the relative strength of the bargaining parties to produce the institutions favourable to themselves and these outcomes can in turn be influenced by ideology and different actors' subjective worldviews regarding what is the best outcome. All of these factors over time

are influenced by distributional norms and the pre-existing divisions of power within society, and this tends to make changes to the status quo difficult. However, any or all of these factors over time can change and create an environment that favours institutional change. For example, ideological shifts were apparent in both locations, and the relative strength of bargaining parties changed over time, for example depending on the formation of strategic alliances and changes in government. The focus on these key factors within the empirical cases highlights the dynamic and complex processes surrounding property rights institutions and the usefulness of the analytical framework in considering political dimensions of property rights within forest management.

8.2 How have the aims of the thesis been addressed?

This thesis has two main aims: to investigate the implicit property rights assumptions of the dominant production/protection forest management regime, particularly in relation to forest communities' rights and access to forest resources; and to analyse how and why property rights institutions are chosen and how property rights institutions evolve over time within the context of forests as contested domains. During the research process, both the theoretical and empirical work sought to address these aims. By exploring theoretical concepts of property rights and developing a conceptualisation of property that incorporates power, exclusion and competing rights claims, a clear basis for understanding forests as contested domains emerged, particularly those forests that have been allocated for timber production. This provided a context for exploring how forest communities have been excluded from decision-making and control of local forest resources, even when they have informal rights claims to those forests. However,

the thesis' second aim seeks to go beyond merely critiquing the property rights assumptions of the dominant forest management regime. It seeks to understand property rights institutions as complex and dynamic processes, incorporating concepts of choice and change. For this reason, an analytical framework was developed based on institutional theory, which explicitly addresses the political dimensions of property rights institutions and proposes four key factors that constrain and influence property rights choice and change.

The case study approach was considered the most appropriate method to address the aims. The Solomon Islands and British Columbia were selected as case studies because they were expected to provide especially illuminating examples: each location had a forest management regime dominated by timber production for export markets; and in each location in the 1990s there was heightened tension and conflict over management and control of the forest resource. They were also selected because of the very differing tenure systems in each location, with 87% of the Solomon Islands being held under customary tenure and with 97% of British Columbia's forests being held under state control. This presented an opportunity for comparative analysis of the property rights themes in different settings, in order to, on the one hand, explore the uniqueness of each case within common themes and, on the other hand, explore the usefulness of the analytical framework in understanding processes in different settings.

The research questions that guided the data collection for each case study were developed because they were considered to be appropriate to the aims and were designed to ensure that data collated was relevant. The research questions were: how has the dominant forest management regime evolved? What are the property rights implications of the forest management regime for communities? How do local communities and the dominant

forest management regime interact? By addressing these questions in each location, issues of control, access and conflict could be investigated as well as interactions between social actors regarding management of the forest resource. The analytical factors provided a useful means of comparative analysis between the case studies and helped explain the dynamic and complex political processes surrounding property rights and forest management, not only in terms of how the institutions were established but also how change has been constrained or mediated over time.

8.3 Contribution to knowledge

The thesis contributes to the literature on property rights and natural resources. It does this by addressing the political nature of property rights and decision-making authority regarding the allocation and use of natural resources. It raises issues of exclusion, power and competing rights claims and in doing so moves beyond the regimes approach common in the literature whereby different property rights regimes are seen as an array of management tools, amongst which it is possible to choose the most appropriate regime depending on the resource, the user group or the demands of the market. It challenges the neutrality of economic approaches to property rights based on resource allocation efficiency and amenability to the market by addressing the political nature of resource allocation and control. It also raises the issue of the power relations and resistance to change inherent in the juridical status quo, whereby formal property rights are protected and upheld by the law even when there are competing rights claims and informal norms.

Whilst there is a vast literature on forests, deforestation and forest management within a wide range of disciplines across natural and social sciences, much of this work is

apolitical in nature, focusing on managerial and technical aspects. The thesis contributes to the emerging literature on political aspects of forest access and control by critically examining the political and dynamic characteristics of property rights institutions and in particular focusing on interactions between local forest communities and the timber regime. By looking at the property rights limitations of the dominant forest management regime in relation to forest communities' access to and control of forest resources, the thesis contributes to an understanding of the political nature of forest access and control and the distributive issues related to forest allocation decisions. In this framework, overlapping, and sometimes competing, rights claims can be explicitly addressed and forests can be understood as contested domains.

Finally, the thesis contributes to the development of institutional theory by focusing on its applicability to analysing political processes. Whilst institutional theory has largely evolved to analyse economic trends, and why inefficient economic outcomes persist, the literature acknowledges the political nature of institutions to explain non-rational outcomes. For example, although North (1990) and Libecap (1989) both consider private property to be the most economically efficient form of property right, they use institutional theory to explain why non-optimal property rights institutions persist. Ostrom (1990), on the other hand, has persuasively argued that common property regimes can offer the most efficient institution for the management of natural resources in certain circumstances. Ensminger (1996), Mehta et al (1999) and Reddy (2002) identify a gap in the institutional literature in terms of addressing institutions and political processes. By identifying the key factors within institutional theory that influence institutional choice and change, and using those factors to analyse political processes rather than economic ones, this thesis makes a small contribution to the

development of institutional theory as an analytical framework for understanding the processual and dynamic nature of property rights as complex political institutions.

8.4 Limitations of the thesis and further research

Whilst the previous section discussed the contribution of the thesis to knowledge, this section reviews its theoretical and methodological limitations and avenues for further research. In terms of the contribution to institutional theory, the thesis identified key factors within the literature that contribute to an understanding of political processes influencing property rights choice and change. In this context, the thesis makes a contribution to analysing the political factors that influence institutional choice and change. There is scope for further research that analyses property rights institutions as dynamic processes rather than static rules. The empirical work indicated that the analytical factors were relevant and aided analysis but no attempt was made to evaluate them in terms of their relative importance or how they interacted with each other. Further research, for example more detailed ethnographic studies, could reveal insights into the role of ideology as a factor influencing property rights institutions in particular locations. Likewise, further research into the changing power of bargaining parties could shed further light on factors that influence institutional change. These could in turn have policy implications for encouraging new institutional arrangements that reflect more inclusive approaches to social actors. Further in-depth studies of cases at different scales, for example more detailed analysis of local property rights institutions for timber production, and how they have evolved within the context of the state forest policy, would be useful. This could be undertaken within an institutional theory approach and would help to further contribute to the development of understanding the political

dimensions of property rights institutions. Such theoretical development in relation to forest management could help analyse not only the problems associated with the dominant forest management regime but could also contribute towards identifying possible solutions to achieving socially inclusive sustainable forest management.

By focusing on the political dimensions of property rights, the thesis has treated environmental issues as exogenous and has not included an ecological perspective. A political ecology approach, which views social institutions as embedded within nature, could reveal insights into the links between forest ecology and the types of local property rights institutions that evolve. The thesis does not engage specifically with discourses around native rights and interpretations of nature (for example as undertaken by Braun (2002)), although this would be relevant in a number of locations.

Complementary research could be undertaken on native interpretations of nature and property rights, from both colonial and post-colonial perspectives, and this could have particular relevance in relation to native rights claims to land, for example in countries such as Canada, New Zealand and Australia.

The thesis recognises the existence of multiple rights claims, both formal and informal, but does not explore the characteristics of these different systems in any detail. Different theoretical and methodological approaches could reveal further insights into the political dimensions of property rights. Legal pluralism could reveal insights into different property rights claims, in particular the types of claims, their characteristics and the source of their authority. This would involve methodologies that were more ethnographic and anthropological in nature.

In terms of the methodology used in the thesis, the decision to undertake research in two countries had advantages and disadvantages. The advantages in terms of breadth of data available for comparative analysis have already been discussed. However, there were disadvantages too. The broad context of the case studies, covering the historical development of forest management policies and interactions with local forest communities, inevitably meant that the richness of individual cases within the case studies, such as the community forest initiatives, could not be fully explored. Theoretical insights could have been revealed by more in-depth study of these. Similarly, by focusing on a comparative analysis of smaller-scale cases within one country, more detailed data could have been revealed that would contribute to theoretical development, for example on one or more of the analytical factors.

Although comparability of data was an explicit aim of the research process, in the event the differences in geographical and political scale of the two places meant that this objective was not always achieved. Whereas the Solomon Islands was predicted to be the problem in terms of data accessibility, BC proved to be problematic for different reasons, notably the size of the province and access to informants. In BC, the large distances and costs of travel meant that interviews with key informants were more limited. In the Solomon Islands it proved much easier to access high-ranking officials and politicians and sensitive data, and it was easier to travel around the country. This was in large part as a result of being in the Solomon Islands in two guises – as PhD researcher and NGO representative. However, to compensate for the fact that the geographic and political scale made it more difficult to interview key informants in BC, the level of availability of forest policy data was much higher. This was in large part

due to the culture of transparency and growth in use of the world wide web as a means of publishing official and policy documentation.

8.5 Final reflections

The research process undertaken to develop this thesis has illuminated a particular epistemological approach to forests that merits closer analysis. This approach assumes that different social actors have different and evolving worldviews about how forests should be managed and that these different worldviews reflect a provisional relationship to forests that is based as much on subjective as on objective realities. The implications of such an approach fundamentally challenge other approaches to forests that are based on scientific certainty, whether economic or ecological. The value of such an approach is that it allows for the possibility of forest management to be reconstituted according to social actors' evolving preferences and needs. However, it also highlights the importance of the implications of power relations, equitable access to decision-making processes and an acceptance of other ways of looking at forests. These aspects could have profound affects on the way forest management is conceived, both as a process and as an outcome.

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Appendix 1 Case study protocol

I. Aims of the thesis

- To explore the implicit property rights assumptions of the dominant forest management regime, particularly in relation to forest communities' rights and access to forest resources.
- To analyse how and why property rights institutions are chosen and how they evolve over time, within the context of forests as contested domains.

II. Conceptualisation of property

This guides the overall analysis of the empirical data.

Property rights are institutions mediating relationships between social actors. The political dimensions of property rights include issues of power, exclusion, access, control, distributional conflict.

Four analytical factors identified in the theoretical literature influence institutional choice and change and these will guide the analysis of empirical data:

Distributional conflict:

Disputes over allocation of benefits and decision-making because there are winners and losers.

Heterogeneous bargaining parties:

The relative power of the bargaining parties influences their ability to obtain the outcomes favourable to them. Bargaining parties can use financial resources, information, strategic alliances, interest groups and political influence as sources of power.

Ideology

The world views of the social actors can influence the kinds of institutions they think are the most appropriate and this can explain non-wealth maximising behaviour, for example those calling for environmental protection.

Historical path dependence

What has happened in the past can influence the decisions and actions that are possible in the present.

III. Research questions for empirical work

The idea of the research questions for each case study is to ensure that data collected is relevant to the aims of the thesis and comparable. Questions to be answered by each case study (level 2 questions: Yin, 1994: 70-73). These will guide the specific data to collect and the content of qualitative interviews.

- How has the dominant forest management regime evolved?
- What are the property rights implications of the forest management regime for communities?

- How do local forest communities and the dominant forest management regime interact?

Background information to collate:

Economic contribution of forestry/forests to national economy; numbers employed; market/trade; forest ecology and geography/politics

Case study questions:

1. What is the link between forest management and tenure?
2. Who are the main stakeholders?
3. What is the nature and extent of conflict over forest management?
4. What is national or provincial forest policy, including responsibility e.g. Ministry?
5. How has forest policy evolved? What have been the forces that have influenced its evolution? What are the other policies that affect forest management?
6. What is the tenure system and ownership/control of forest resource? What have been the changes over time? include protected areas, community/indigenous control etc.
7. What is the decision-making process re. the assignation of timber cutting rights? Has this changed over time?
8. How extensive are community forest management projects? Try to find examples in each case study

IV. Data sources:

Interviews

with forestry department staff; NGOs; community group representatives;
others as relevant in situ

Documentation

Current:

forest policy; forest legislation; community management plans;
company documentation; other relevant primary and secondary data gathered in

situ

Documentation

Archival:

forest policy; forest legislation; royal commissions; legislative debate;
correspondence;
other as relevant in situ

Appendix 2 Key informants

Solomon Islands October 1995	
Interviewee	Location of Interview
Abraham Baenesia, Solomon Islands Development Trust	Honiara
Moses Bariri, Solomon Islands Indigenous Peoples Environment Organisation	Honiara
Keith Campbell, National Forestry Action Plan Co-ordinator, Ministry of Forests	Honiara
Seri Hite, WWF and representative from Michi Village, Western Province	Honiara
Roger James, Solomon Islands Development Trust (based on Makira)	Honiara
Lawrence Kilivesi, from Viru Harbour, Western Province	Honiara
Seamus Mulholland, Commercial Manager, Timber Control Unit, Ministry of Forests	Honiara
Rick Hou, Governor, Central Bank of Solomon Islands	Honiara
John Roughan, Solomon Islands Development Trust	Honiara
Group discussion with villagers from Dorio Province, Malaita	Honiara
Group discussion with women villagers	Lambi Bay

Solomon Islands August-September 1996	
Interviewee	Location of interview
Moses Bariri, Solomon Islands Indigenous Peoples Environment Organisation	Honiara
Seri Hite, WWF and Michi Village representative	Gizo
Patrick Lavery, Public Solicitor	Honiara
John Roughan, Solomon Islands Development Trust	Honiara
Sam Patavaqara, Solomons Western Islands Fair Trade (SWIFT) project	Honiara
Willie Fetei, Isabel Sustainable Forest Management Project	Buala
Peter King, Isabel Sustainable Forest Management Project	Buala
Mary Morrissey, Legal Advisor, Isabel Province	Buala
Savakana Smith, Timber Control Unit, Isabel Province	Buala
Group discussion, provincial executive members, Isabel Province	Buala
Group discussion with landholders	Settlement north of Buala

British Columbia January – February 1999	
Interviewee	Location
Paul Mitchell-Banks, Researcher on community forestry	Vancouver
Mitch Anderson, Staff Scientist, Sierra Legal Defence Fund	Vancouver
Kelly Fink, Project Leader, Community Forest Pilot Project, Resource Tenures and Engineering Branch, Ministry of Forests	Victoria
Craig, Aboriginal Affairs Branch, Ministry of Forests	Victoria
Marilyn Burgoon, Perry Ridge Water Users Association	Silverton and New Denver
Colleen McCrory, Director, Valhalla Wilderness Society	Silverton and New Denver
Susan Hammond, Executive Director, Silva Forest Foundation	Slocan Park
Earl Sept, Timber Forester, Nelson Forest Region, Ministry of Forests	Nelson
Group Discussion with Ramona Faust, Rami Rothkop, Karen Kane, Harrop Procter Watershed Protection Society	Nelson